



User Manual

HD Pan & Tilt Day/Night Network Camera

Cloud Camera

DCS-5029L

Manual Overview

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Manual Revision

Revision	Date	Description
1.00	September 29, 2014	• Initial release
1.10	October 8, 2014	• Minor changes
1.11	July 29, 2015	• Added DI/DO Specifications

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Safety Instructions

Follow the safety guidelines listed below to ensure your own personal safety and to help protect your product from potential damage.

If any of the following conditions occur, unplug the product from the electrical outlet and either replace the part that is damaged, or contact the place of purchase:

- The power cable, extension cable, or plug is damaged.
- An object has fallen into the product.
- The product has been exposed to water.
- The product has been dropped or damaged.
- The product does not operate correctly when you follow the operating instructions.

Follow the safety guidelines below:

- Do not spill food or liquids on product, and never operate the product in a wet environment. If the product gets wet, see the appropriate section in your troubleshooting guide.
- Operate the product only from the type of external power source indicated on the electrical ratings label. If you are not sure of the type of power source required, consult your local power company.
- Use only the power adapter that came with the product. Using another adapter, not recommended by the manufacturer, may damage the product and invalidate the warranty.
- To help prevent an electric shock, plug the product into properly grounded electrical outlets.
- Observe power strip ratings. Make sure that the total ampere rating of all products plugged into the power strip does not exceed 80 percent of the ampere ratings limit for the power strip.
- To help protect your product from sudden, transient increases and decreases in electrical power, use a surge suppressor, line conditioner, or uninterruptible power supply (UPS).

-
- Position product cables and power cables carefully. Route cables so that they cannot be stepped on or tripped over. Be sure that nothing rests on any cables. Do not modify power cables or plugs. Consult a licensed electrician or your power company for site modifications. Always follow your local/national wiring rules.
 - This product is designed for indoor use only, and must always be positioned where it is not exposed to direct sunlight or strong halogen light. Exposure to direct sunlight or halogen light may cause permanent damage to the image sensor in the product.

Warnings

- **STRANGULATION HAZARD!** – Keep cords out of the reach of children. Keep and secure all cords a minimum of three feet away from a crib or other child sleeping area.
- This product contains small parts that may cause choking. **Keep out of reach of children.**
- This product is not a toy. Do not allow children to play with it.
- The product is designed for **Indoor Use Only!**
- The product should not be used in a location where it could become wet!
- Ensure the product is fixed securely otherwise it may fall and cause injury!
- This product is NOT intended to replace proper supervision of children. You must check your child's activity regularly, as this product will not alert parents to activity of children.
- Do not use extension cords. Only use the power adapter provided with this product.
- Do not use this product near a heat source.

THIS DEVICE REQUIRES THIRD-PARTY SERVICES AND PRODUCTS TO ACHIEVE FULL FUNCTIONALITY, INCLUDING BUT NOT LIMITED TO, BROADBAND INTERNET SUBSCRIPTION SERVICES AND PRODUCTS; MOBILE INTERNET SUBSCRIPTION SERVICES, COVERAGE AND PRODUCTS; CAMERA MANAGEMENT SOFTWARE, AND; A NETWORK CONNECTION. D-LINK HAS NO CONTROL OVER SUCH SERVICES AND PRODUCTS AND EXPRESSLY DISCLAIMS ANY AND ALL LIABILITY FOR THE FAILURE OF THE DEVICE OR ANY FEATURE THEREOF RESULTING FROM THE FAILURE OF ANY THIRD-PARTY SERVICE OR PRODUCT.

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Product Overview

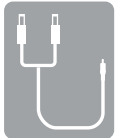
Package Contents



DCS-5029L HD Pan & Tilt Day/Night Network Camera



Ethernet Cable



Audio In/Out Cable



Power Adapter



Mounting Kit



Quick Install Guide

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.

Minimum Requirements

Network Requirements	<ul style="list-style-type: none">• Wired 10/100 Fast Ethernet or a wireless 802.11g/n wireless network (Wireless N network recommended for optimum performance)
Web-based Configuration Utility Requirements	<p>Computer with the following:</p> <ul style="list-style-type: none">• 1.3 GHz processor or above and at least 128MB RAM• Windows® 8, 7, Vista®, or Mac OS®X (10.6 or higher) <p>Web Browser:</p> <ul style="list-style-type: none">• Internet Explorer® 8 or higher• Firefox®• Chrome™• Safari® 5 or higher <p>Windows® Users: Make sure you have the latest version of Java installed and enabled. Visit www.java.com to download the latest version.</p>
Network Device and Service	<ul style="list-style-type: none">• A router (D-Link Cloud Router is recommended)• An Internet connection• An e-mail account (required to create a mydlink™ account)
mydlink Requirements	<ul style="list-style-type: none">• For mydlink and mydlink app requirements refer to: http://www.mydlink.com

Introduction

The DCS-5029L HD Pan & Tilt Day/Night Network Camera is a versatile surveillance solution for your home or small office. The DCS-5029L is a complete system with a built-in CPU and Web server that transmits HD 720p video for superior image quality. The pan/tilt function allows the camera to patrol a wide area, while the built-in IR LEDs provide around-the-clock surveillance regardless of the lighting conditions.

The camera can be accessed remotely, and controlled from any PC/Notebook over your local network or through the Internet using a Web browser. The DCS-5029L features 802.11n wireless connectivity, allowing the camera to be placed anywhere within range of your wireless network.

Your DCS-5029L is mydlink-enabled, which means that you can view and manage your camera from anywhere over the Internet through the mydlink website, or through the mydlink mobile app for iOS and Android. You can view your camera's live video, take snapshots, and manage the camera's configuration, all from anywhere you have Internet access.

Features

Easy to Use and mydlink-Enabled for Easy Access and Management

The DCS-5029L is a stand-alone surveillance camera that requires no special hardware or software, and can operate independently, even without a PC. This camera is also mydlink-enabled, which means you can view and manage your camera through the mydlink website, or through the mydlink mobile app for iOS and Android mobile devices.

Supports a Variety of Platforms

The DCS-5029L supports TCP/IP networking, HTTP, and other Internet-related protocols. It can also be integrated easily into other Internet/Intranet applications because of its standards-based features.

Pan/Tilt for Wide Viewing Area

Patrol a larger area with one camera, thanks to the DCS-5029L's 340° pan and 105° tilt capability. You can use the Web interface to manually adjust the camera lens position, or set up to 24 pre-defined preset positions, enabling you to quickly move to frequently used points of interest.

IR LEDs for Day and Night Functionality

The built-in infrared LEDs enable nighttime viewing of up to 26 feet (8 meters), giving you clear images regardless of lighting conditions.

Motion Triggered Notifications and Recordings

The DCS-5029L can send e-mail notifications with snapshots or video clips whenever motion is detected. You can designate areas to monitor for motion, allowing you to keep watch over specific areas of interest. The DCS-5029L can also upload images to an FTP server whenever motion in these areas is detected.

802.11g/n Wireless or Ethernet/Fast Ethernet Support

The DCS-5029L offers wireless 802.11g/n and Ethernet/Fast Ethernet connectivity, making it easy to integrate into your existing network environment. The DCS-5029L works with either a 10 Mbps Ethernet-based network or 100 Mbps Fast Ethernet-based network for traditional wired environments, and works with 802.11g/n wireless routers or access points for added flexibility. The Site Survey feature also allows you to view and connect to any available wireless network within range of the camera.

Hardware Overview

Front View



1	Light Sensor	Detects light levels and adjusts IR-LEDs accordingly.
2	Camera Lens	Records video of the surrounding area.
3	Passive Infrared Sensor	Passive Infrared (PIR) sensor for motion detection.
4	Power/Link LED	The LED will be solid red while the camera boots, performs a self test, and searches for a network connection. The LED will switch to solid green when a proper connection has been achieved. The LED will blink green during data transfer.
5	IR LEDs*	Used to illuminate the camera's field of view at night.
6	Focus Adjustment Ring	Turn the ring surrounding the camera lens to manually adjust the camera's focal length.
7	Microphone	Records audio from the surrounding area.
8	WPS Status LED	Indicates the WPS (Wi-Fi Protected Setup) connection status of the camera.

***Note:** If you see a white haze when viewing in night vision mode, the IR lights on the camera may be reflecting off a nearby surface. Try repositioning the camera in order to avoid glare from the IR LEDs.

Rear View



1	Audio In/Out	3.5 mm jack for audio I/O devices such as microphones and speakers.
2	Reset Button	Press the reset button to return the device back to its factory default settings.
3	Ethernet Port	Connect 10/100 Ethernet devices such as computers, switches, and routers.
4	DI/DO Port	Attach digital I/O devices such as alarms or motion sensors.
5	Power Receptor	Connect to the supplied power adapter.

Left and Right Side



1	Built in Speaker	The speaker can be used in conjunction with the built-in microphone to enable the camera to act as an intercom.
2	Antenna	The external antenna increases the device's range of connectivity.
3	WPS Button	Use WPS (Wi-Fi Protected Setup) to easily create a secure connection to your network.
4	microSD Slot	Insert a microSD card to store recorded images and video.

Wireless Installation Considerations

Your D-Link Wireless Network Camera lets you access your network using a wireless connection 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 router and other network devices (such as your network camera) - each wall or ceiling can reduce your adapter's range by 3-98 feet (1-30 meters).
2. Be aware of the direct line between network devices. A wall that is 1.5 feet thick (half a meter), at a 45-degree angle appears to be almost 3 feet thick (1 meter). At a 2-degree angle, it looks over 46 feet thick (about 14 meters). 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 (1-2 meters) away from electrical devices or appliances that generate RF noise.
5. If you are using 2.4 GHz cordless phones or other radio frequency sources (such as microwave ovens), your wireless connection may degrade dramatically or drop completely. Make sure your 2.4 GHz phone base is as far away from your wireless devices as possible. The base transmits a signal even if the phone is not in use.

Installation

There are three ways to set up your camera:

Zero Configuration Setup: If you have a mydlink-enabled router (D-Link Cloud Router), this is the easiest way to set up your camera. Refer to [“Zero Configuration Setup” on page 16](#).

Camera Setup Wizard: If you do not have a mydlink-enabled router, use the Camera Setup Wizard to guide you through installation and initial configuration of your camera. Refer to [“Camera Setup Wizard” on page 20](#).

Manual Hardware Installation: This section shows you how to manually set up your camera. However, in order to use the mydlink features of your camera, you will still need to run the Camera Setup Wizard. Refer to [“Manual Hardware Installation” on page 21](#).

Note: *If you experience issues registering this device with your mydlink account, or If you purchased an open box or resold unit, perform a hard reset by pressing and holding the reset button on the device for 10 seconds while the device is powered on. **If you are returning the device to the place of purchase, please perform the hard reset procedure to clear the device of any personal data.***

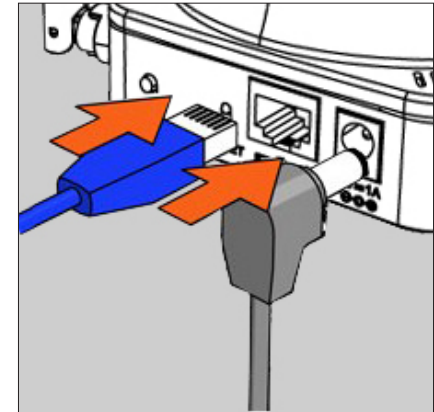
Zero Configuration Setup

The Zero Configuration Setup will only work with a registered Cloud Router and an active mydlink account. Your Cloud Router will automatically assign your network settings (both wired and wireless) to your camera, and add the camera to your mydlink account. If you do not have a D-Link Cloud Router, you can use the Setup Wizard. Refer to [“Camera Setup Wizard” on page 20](#).

Connect the Power Cable and Ethernet Cable

Step 1

Attach the power supply to the power receptor located on the back of the DCS-5029L and connect it to a wall outlet or surge protector. Power is confirmed when the Power LED is lit.

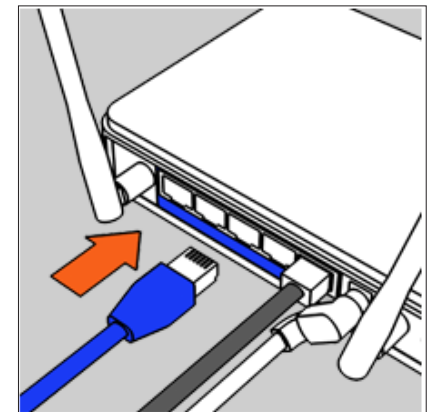


Step 2

Connect the included Ethernet cable to the Ethernet port located on the back of the DCS-5029L. Plug the other end into an available (LAN) port on your D-Link Cloud Router.

Note: If you later decide to use your camera wirelessly, you will be able to remove the cable after the Zero Configuration Setup is complete and place the camera within your wireless network.

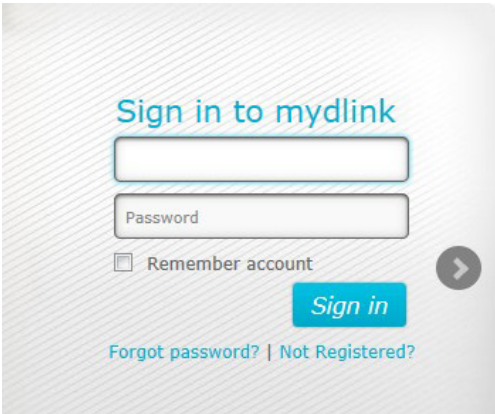
If you prefer to initiate a wireless connection with your router, you can use WPS (Wi-Fi Protected Setup). Refer to [“WPS - Push Button Setup” on page 19](#).



Add Your Camera to Your mydlink Account

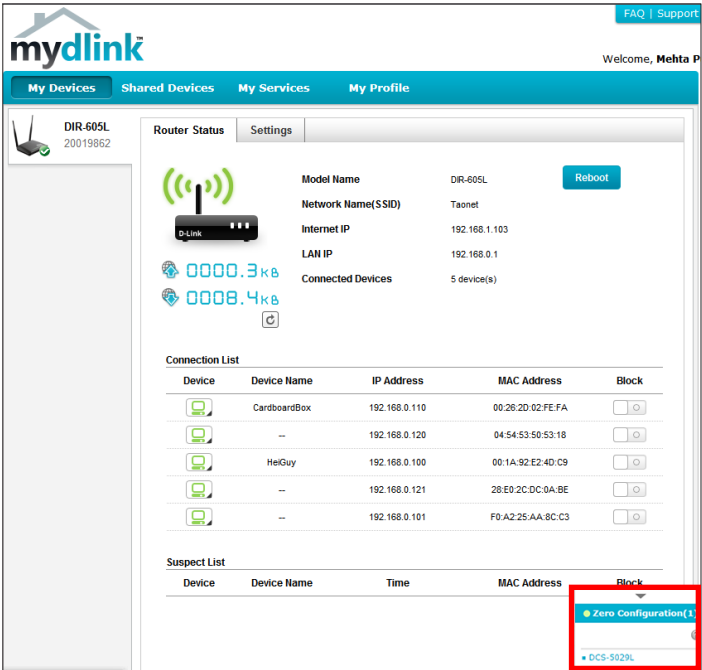
Step 3

From a computer connected to the Internet, open a Web browser (e.g., Internet Explorer, Chrome, Firefox, or Safari) and log in to your mydlink account.



Step 4

The mydlink page will automatically check for new devices. Once mydlink detects your camera, a notice will appear that says, **Zero Configuration** (at the bottom of the screen). Click the notification to continue.



Step 5

A confirmation request will appear with a summary of the configuration details. Make a note of the details and click **Yes** to add the camera to your account. Your setup is complete!

Note: If you experience issues registering this device with your mydlink account, perform a hard reset by pressing and holding the reset button on the device for 10 seconds while the device is powered on.

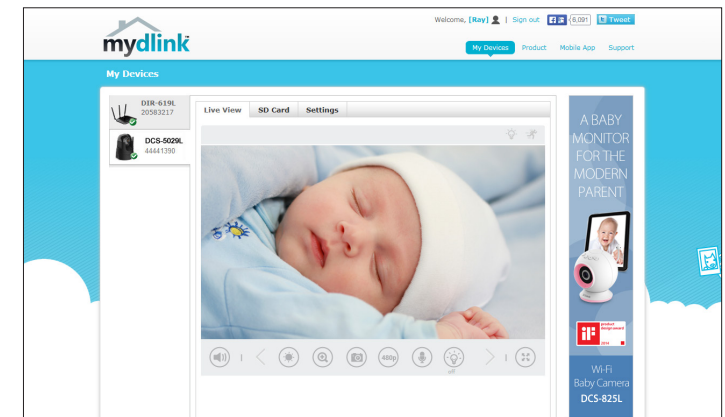


Next you will see the mydlink *Live View** for your camera. The screen will look similar to the screenshot on the right.

Note: If you used an Ethernet connection and now want to connect your camera to your router wirelessly, you can simply disconnect the Ethernet cable and move the camera to the preferred location. Your router's wireless settings were automatically transferred to the camera during Zero Configuration Setup, so no further configuration is required.

If you are interested in learning about advanced configuration of your camera, you can skip to ["Configuration" on page 28](#).

***Note:** If the live image is blurry, you can adjust the focus by rotating the manual focus adjustment ring that surrounds the camera lens. If you notice a white haze when viewing in night vision mode, the night vision light on the camera may be reflecting off a nearby surface. Try repositioning the camera.



WPS - Push Button Setup

If you have a D-Link Cloud Router and an active mydlink account, the easiest way to create a secure wireless connection is by using the WPS Button on the back of the DCS-5029L. After you complete **Step 3** below, you can register your camera with mydlink. Refer to [“Add Your Camera to Your mydlink Account” on page 17](#).

If you do not have a D-Link Cloud Router, use an Ethernet connection as shown under [“Manual Hardware Installation” on page 21](#). WPS setup only establishes a wireless connection, so in order to use the mydlink features of your camera, you will still need to run the Camera Setup Wizard (proceed to the next page).

To create a WPS connection:

Step 1

Make sure the camera is plugged in, then press and hold the WPS button on the side of the camera for ten seconds. The blue WPS status LED will start blinking.

Step 2

Press the WPS button on your router within 60 seconds. The WPS button is usually on the front or side of your router. If you are not sure where the WPS button is located on your router, refer to your router's User Manual. 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.

Step 3

Allow up to one minute to configure. The DCS-5029L will automatically create a secure wireless connection to your router. The blue LED will flash and your camera will reboot.

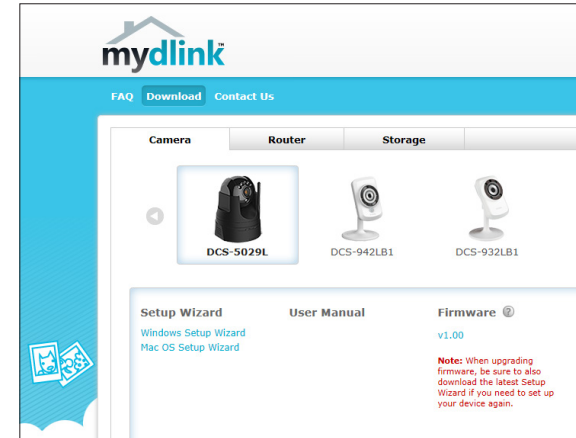


Camera Setup Wizard

If you do not have a mydlink-enabled Cloud Router, you can use either a Windows or Mac computer to go through the Camera Setup Wizard, which will guide you through the installation process. First you must download the Camera Setup Wizard from <http://www.mydlink.com/support>.

Windows Users - Download the **Windows Setup Wizard** file to your computer.

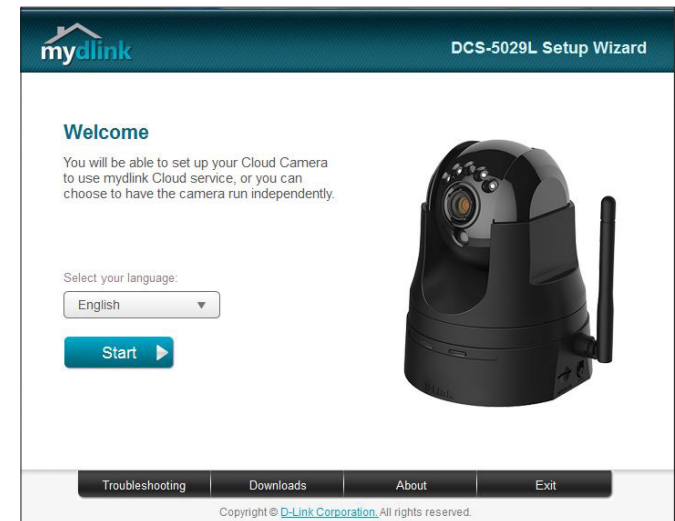
Mac Users - Download the **Mac OS Setup Wizard**. Open the **SetupWizard** file and launch the application.



Within 20 - 30 seconds, the Setup Wizard will open, which will guide you step-by-step through the installation process from connecting your hardware to configuring your camera and registering it with your mydlink account.

Click **Start** to begin.

Note: If you experience issues registering this device with your mydlink account, perform a hard reset by pressing and holding the reset button on the device for 10 seconds while the device is powered on.



Note: At the end of the Setup Wizard, you can click **Go To Camera** if you wish to access the Configuration Utility. Refer to [“Using the Web Configuration Utility” on page 28](#).

Manual Hardware Installation

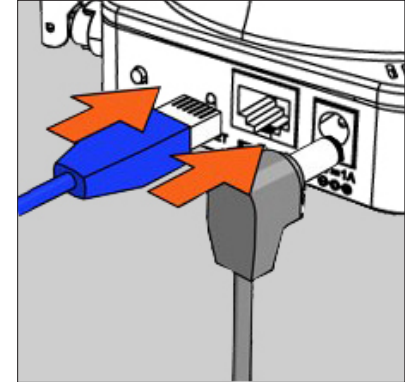
If you prefer to set up your camera without using the Camera Setup Wizard, follow the steps below.

Note: In order to use the mydlink features of this product, you should use either the Camera Setup Wizard or Zero Configuration Setup. To learn more about mydlink, refer to [“Live Video” on page 24](#).

Connect the Power Cable and Ethernet Cable

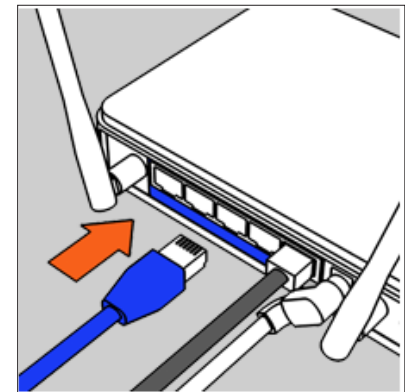
Step 1

Attach the power supply to the power receptor located on the back of the DCS-5029L and connect it to a wall outlet or surge protector. Power is confirmed when the Power LED is lit.



Step 2

Connect the included Ethernet cable to the Ethernet port located on the back of the DCS-5029L. Plug the other end into an available (LAN) port on your router.



Optional: WPS (Wi-Fi Protected Setup)

If your router supports Wi-Fi Protected Setup, you can use WPS to connect your camera to your network wirelessly. For more information, refer to [“WPS - Push Button Setup” on page 19](#). If your router does not support WPS, you will still be able to set up your camera’s wireless settings using the camera’s Web interface. Refer to [“Wireless Setup” on page 39](#).

Configure Your Camera

Refer to [“Configuration” on page 28](#) for information on how to configure your camera.

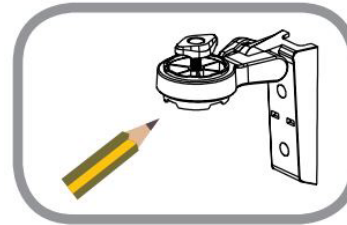
Mounting Instructions

To mount your camera on a wall or ceiling, please follow the steps below.

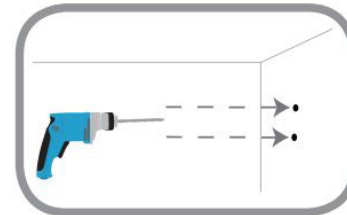


We suggest that you configure the camera before mounting.

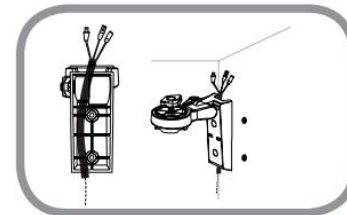
1. Place the arm mount where you want to position the camera and use a pencil to mark the holes. Make sure you allow adequate space for the necessary cables to be routed. The camera can be mounted to either side of the camera shoe.



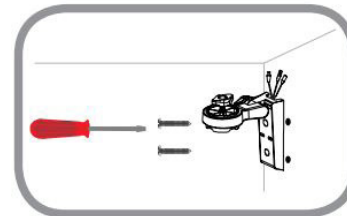
2. Depending on the material of the wall or ceiling, use a 6mm drill bit to drill two holes where you marked. If the wall is made out of concrete, after drilling the holes, insert the plastic anchors, and then insert the screws.



3. The power and Ethernet cables can be concealed behind the mounting bracket. When you run the cables through the channel, secure them with the built-in guides. Leave enough cable length protruding from the top to connect the cables to the camera.

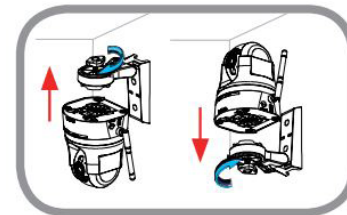


4. Fasten the arm mount to the wall using the screws provided. Lightly pull on the arm mount to make sure it is fastened securely.

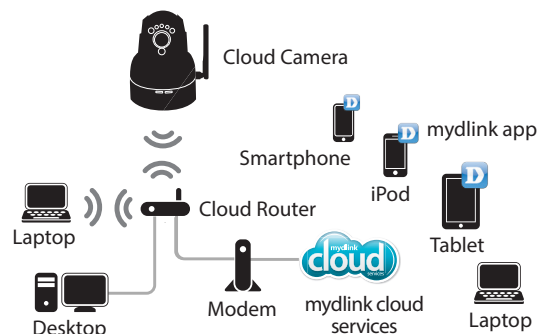


Do not overtighten the screws as this may crack the mounting bracket.

5. Align the camera base mounting guides with the camera shoe and thumbscrew on the arm mount. Tighten the thumbscrew to lock the camera in place.



What is mydlink?



mydlink provides users with a quick and easy way to view and to manage multiple cameras over the Internet. With a DCS-5029L mydlink-enabled camera, you can stay connected to everything you love from anywhere, anytime.

You can add the DCS-5029L to your mydlink account during the Setup Wizard. After downloading one of the mydlink apps (see below), you will be able access the camera with your smartphone or tablet.

mydlink Apps

mydlink Lite App (Free)

Search for “mydlink lite” to download and install the app on your smartphone or tablet when connected to the Internet. You can also find the app by scanning the QR code below with a QR code scan app.



mydlink+ App (Paid - Tablet Only)

Search for the word “mydlink+” to download and install the app on your tablet when connected to the Internet. You can also find the app by scanning the QR code below with a QR code scan app.

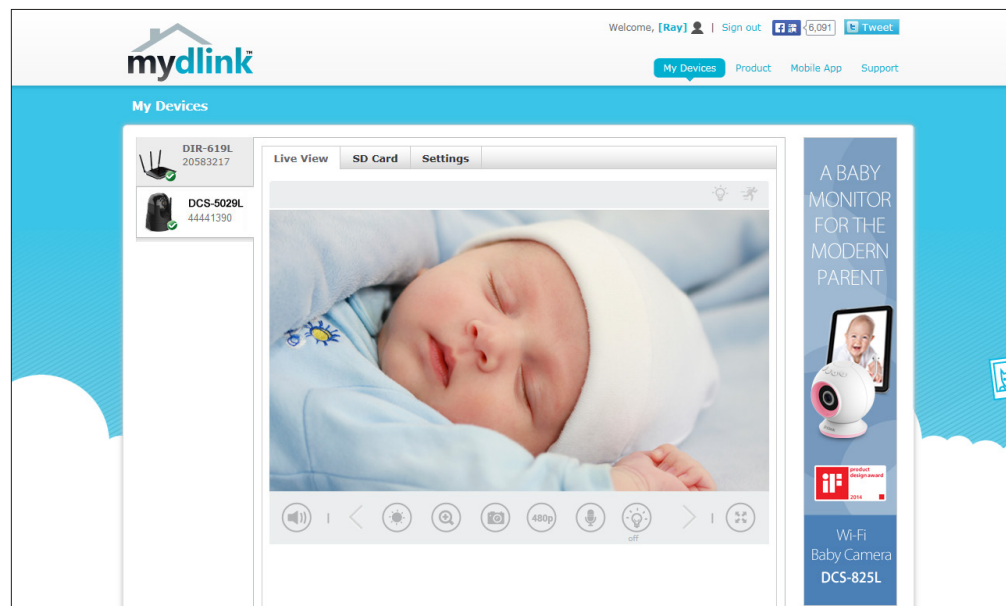


mydlink Requirements: for mydlink and mydlink app requirements refer to: www.mydlink.com

Live Video

The DCS-5029L is a mydlink-enabled camera, which means you can register your camera with a mydlink account. This will allow you to use the mydlink Cloud Services, which include free access to the mydlink portal website.

After you register your DCS-5029L, you will be able to remotely access your camera from the **www.mydlink.com** website. When you log in to your mydlink account and select your camera from the device list, you will see a Live Video screen similar to the one shown below:



- Windows does not have Java installed by default. Please download it from <http://www.java.com>.
- In Mac OS X 10.7.x, Java applets are disabled by default. Click the **Finder > Applications > Utilities > Java Preferences** and check the **Enable applet plug-in and Web Start applications** option.
- The ActiveX® controls in IE will install automatically if needed. We suggest that you make sure that you have enabled the related options in **Tools > Internet Options > Security > Custom Level**.

Note: If the live image is blurry or out of focus, you can adjust the focus by rotating the manual focus adjustment ring that surrounds the camera lens.

Camera Status

The online status of each camera will be displayed. Your camera's online status may be one of the following:



A green check mark 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 currently offline and cannot be accessed remotely.

If your camera is offline, try the following:

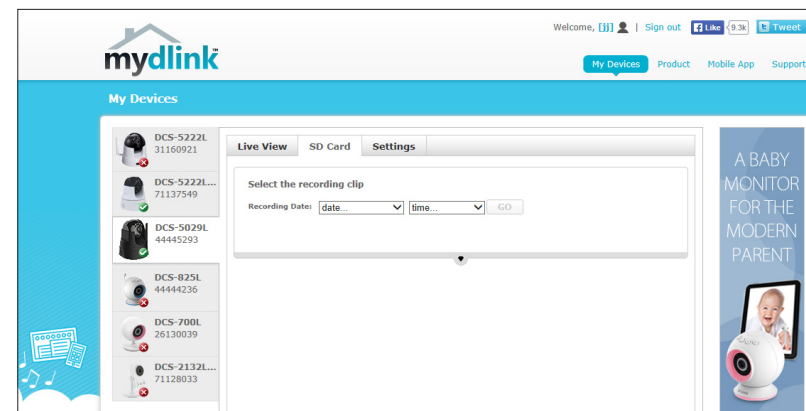
- Check to make sure that the power LED on your camera is lit (either solid red or solid green).
- If it is solid green, check to make sure that the Internet connection to your camera is working properly.
- If it is solid red, reconnect your camera to your router. Refer to [“Zero Configuration Setup” on page 16](#) or [“Manual Hardware Installation” on page 21](#).
- For a wired connection, make sure the Ethernet connection between your camera and router is secure.
- If the Power LED is off, check the power source.

LEDs	Color	Status	Description
Power	None	Off	Power OFF
	Red	On	Power ON/with no network connection
	Green	On	Connected to the network
		Blinking	Network traffic
WPS	Blue	Off	WPS not in use
		On	Successfully connected
		Blinking	Trying to connect

SD Card

Insert a microSD card into the microSD card slot, and you can start recording video from your camera. To play back recorded videos, log in to your mydlink account, access your camera, and click on the **SD Card** tab to locate videos for viewing.

Recording Date: Select the recording **date** and **time** from the drop-down menu. Click **GO** to view recorded video from your microSD card.



Settings

The Settings tab contains a *General Information* section that displays various details about your camera.

Device Name: You can enter a **Device Name** for your camera to help you identify it.

mydlink No.: Displays the *mydlink number* for your camera.

Model Name: Displays the *model name* for your camera.

MAC: Displays the *MAC address* for your camera.

Device activated on: Displays the *date* and *time* that your camera was added to your mydlink account.

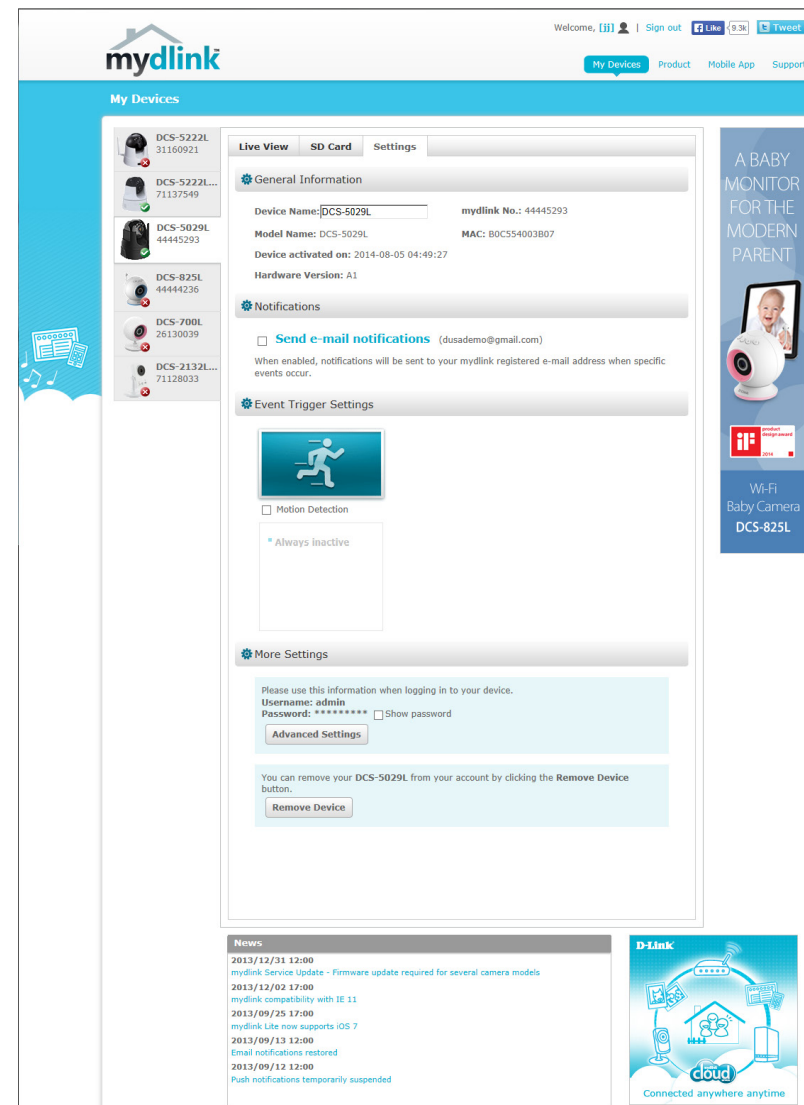
Hardware Version: Displays your camera's *hardware version*.

Send Email Notification: Check the box to enable email notification. Notifications will be sent to your mydlink registered email address when events are triggered.

Motion Detection: Check the box to enable motion detection and click the icon to configure the motion detection settings on your camera.

Advanced Settings: Click to configure advanced features for your camera. The *Username* will be **admin** by default. Enter your *Password* for the camera (not your mydlink password).

Remove Device: Click if you want to remove and un-register the camera from your mydlink account.



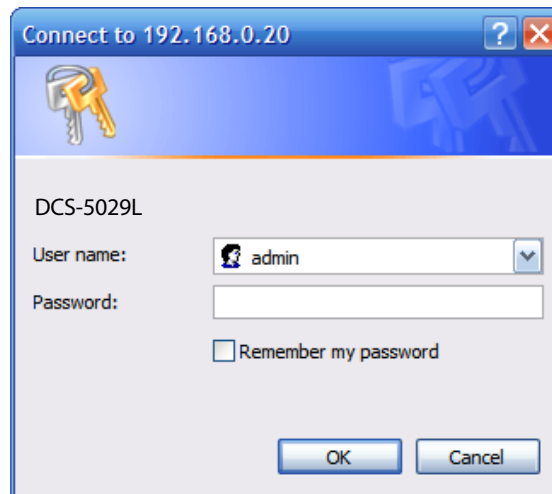
Configuration

Using the Web Configuration Utility

After completing the Camera Setup 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-5029L. There are two ways in which you can access your camera's Web configuration interface:

- Log in to your mydlink account, click on the **Settings** tab, and click on **Advanced Settings** (as shown on the previous page) to access your camera's Web configuration utility.
- You can also access the configuration utility locally by entering the IP address of your camera into a Web browser, such as Internet Explorer. To log in, enter the *User name* **admin** and the *Password* you created in the Setup Wizard. (If you did not create a password, leave the password field blank.) After entering your password, click **OK**.

Note: *If you are directly connecting your camera to your PC, or if you are using the camera on a closed network, the default IP address is 192.168.0.20. If the camera is connected to a router or network, a different IP address may have been assigned.*



Live Video

The Live Video screen displays the live video feed from your camera. Below are descriptions for the controls on the left side of the Live Video screen. For quick reference, see the control table on the next page. (The buttons at the bottom of the Live Video screen are described on the following page.)

For information on how to configure your video settings, refer to [“Audio and Video” on page 43](#).

SD Status: This field displays the status of the microSD card if one has been inserted.

IO Status: This field displays the status of the I/O device if one has been connected.

PTZ Control: Click on the directional arrows around the rim of the *Pan/Tilt/Zoom Control* to manually control the pan and tilt functions of the camera. At any time, you can click the (+) button in the center of the wheel to return the camera to its Home position. The icons to the left and right of the (+) button are used to *Zoom In* and *Zoom Out*.

Go To: If presets have been defined, you can select one of the preset locations from the drop-down menu to move the camera to that position. (Instructions for presets are provided under [“PTZ Setup” on page 44](#).)

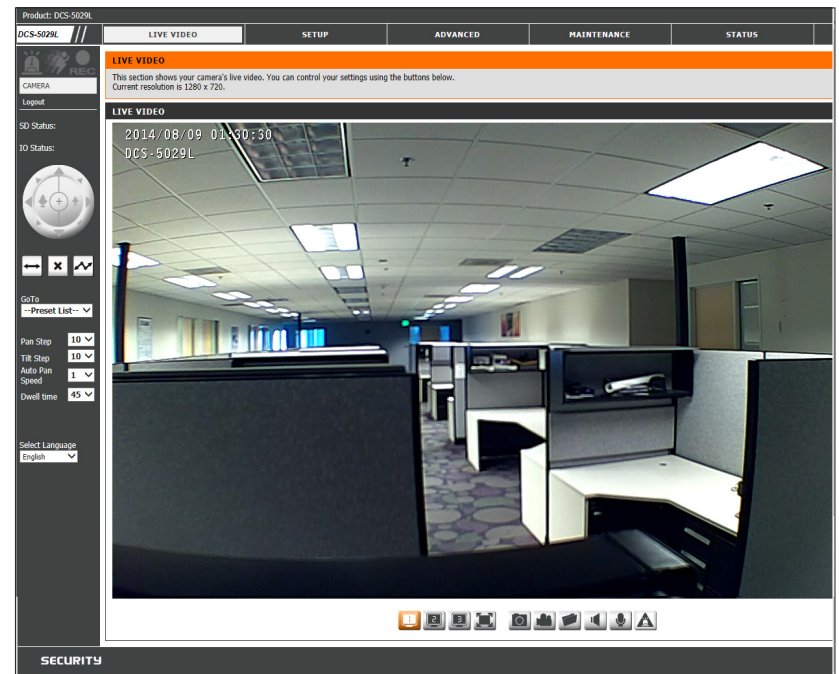
Pan Step: Select a number that controls how much the camera should move up or down each time the user presses the up/down (pan) arrow on the PTZ Control.

Tilt Step: Select a number that controls how much the camera should move left or right each time the user presses the left/right (tilt) arrow on the PTZ Control.

Auto Pan Speed: Select a number that controls how much the camera should speed up or slow down when automatically panning, with 0 being the slowest and 10 being the fastest.

Dwell Time: Select a number that controls how long the camera will remain in the same preset position. (Refer to [“PTZ Setup” on page 44](#) for more information about presets.)








Language: You can select the preferred language for the Web interface from this drop-down menu.











Note: If the live image is blurry or out of focus, you can adjust the focus by rotating the manual focus adjustment ring that surrounds the camera lens.

Control Table

The icons and buttons in the table below are located in the first column of the Live Video screen. The table on the next page contains the buttons that appear across the bottom of the Live Video screen.

Icon/Button	Button Name	Function
	Digital Input Indicator	This indicator will change color when a digital input signal is detected.
	Motion Trigger Indicator	This indicator will change color when a motion trigger event occurs if the motion detection feature is enabled.
	Recording Indicator	When a recording is in progress, this indicator will change color.
	Zoom In/Zoom Out	The icons on each side of the (+) in the middle of the PTZ Control wheel are used to Zoom In (provide a close-up view of the image) and Zoom Out (show a wider view of the image).
	Auto Pan	Starts the automatic panning function. The ROI will pan from back and forth within the FOV (field of view).
	Stop	Stops the automatic panning function.
	Preset Path	Starts the camera's motion along the predefined path.

Below is a description of the buttons that appear across the bottom of the Live Video screen.

Button	Button Name	Function
	Profile Buttons	Use these buttons to switch between video profiles. Refer to "Audio and Video" on page 43 for information on setting up profiles.
	Full Screen Button	Click to display the video at full screen.
	Snapshot Button	Click to take a snapshot of the image currently displayed on the screen and save it to a file on the hard drive in a folder specified using the Storage Folder button.
	Video Recording Button	Click to trigger the camera's recording function. This will record the video displayed on the screen and will save it to a file on the hard drive in a folder specified using the Storage Folder button.
	Storage Folder Button	Click to select a Storage Folder for saving snapshots and video recordings to.
	Listen Button	Click to send the audio received from the camera's microphone to the PC's speakers. Click again to stop audio in.
	Talk Button	Click to end audio from a microphone connected to your PC to the speakers connected to the camera. Click again to stop audio out.
	Start/Stop Digital Output	Press this button to start and stop digital output.

Setup Setup Wizards

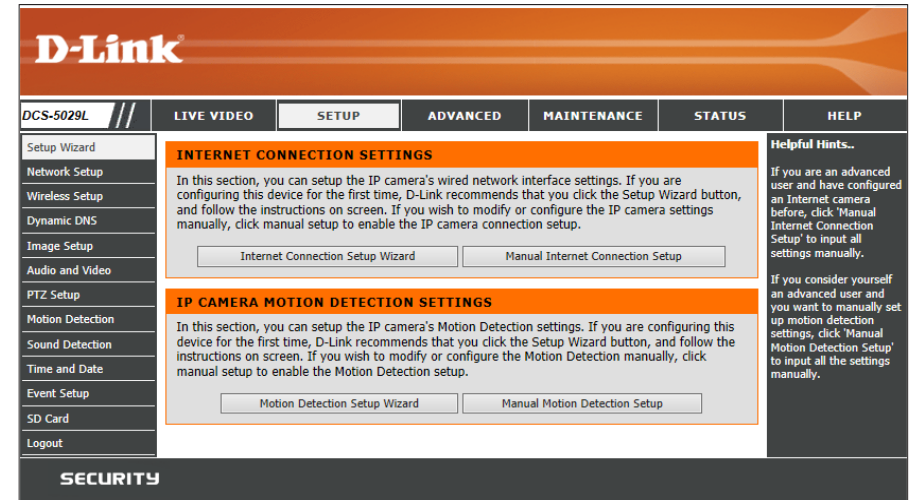
The *Camera Setup Wizard** is just one of the wizards provided for installation. There is also an *Internet Connection Setup Wizard*, which gives step-by-step instructions for simply configuring your new DCS-5029L and connecting it to the Internet.

Internet Connection Setup Wizard: You can use the wizard's step-by-step instructions to configure your camera and connect it to the Internet. Refer to ["Internet Connection Setup Wizard" on page 33](#).

Manual Internet Connection Setup: Click to manually set up your camera's connection to your network and/or modify the network settings. Refer to ["Network Setup" on page 37](#).

Motion Detection Setup Wizard: You can use the wizard's step-by-step instructions to configure your camera's motion detection settings. Refer to ["Motion Detection Setup Wizard" on page 35](#).

Manual Motion Detection Setup: Click to manually set up your camera's motion detection settings. Refer to ["Motion Detection" on page 46](#).

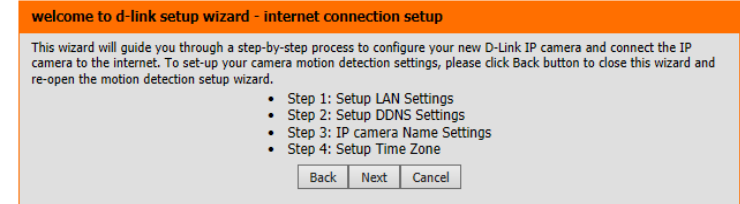


***Note:** To register your camera with mydlink and enable its mydlink-related features, you should use the Camera Setup Wizard for installation. Please refer to ["Camera Setup Wizard" on page 20](#).

Internet Connection Setup Wizard

The Internet Connection Setup Wizard will guide you through a step-by-step process to configure your DCS-5029L and connect the camera to the Internet.

Click **Next** to continue.



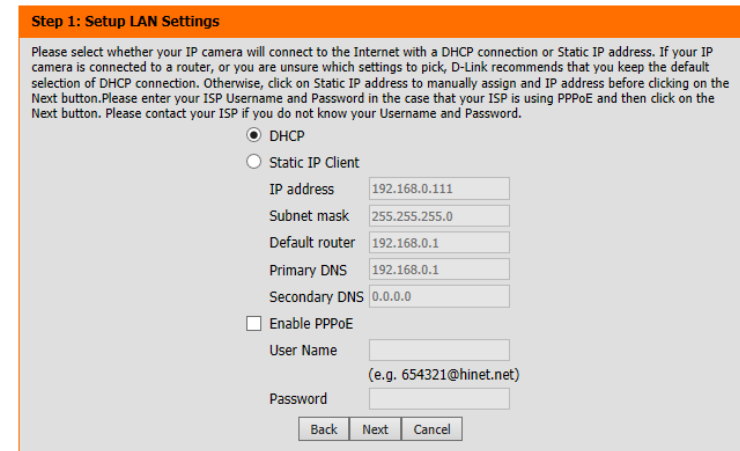
Select what kind of Internet connection your camera should use:

DHCP (Default): Leave this option selected if you have a DHCP server running on your network and would like a dynamic IP address to be assigned to your camera automatically.

Static IP Client: This will allow you to manually enter your network settings for the camera. Select this option if your Internet Service Provider (ISP) or network administrator has provided you with a set of predefined IP addresses. If you are not sure what settings to enter, check with your ISP or network administrator.

Enable PPPoE: If your camera is directly connected to the Internet through a DSL modem, you may select this option. Enter the **User Name** and **Password** provided to you by your ISP.

Click **Next** to continue.



Section 4 - Configuration

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

Click **Next** to continue.

Step 2: Setup DDNS Settings

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

Enable DDNS

☐

Server Address

www.dlinkddns.com

<<

www.dlinkddns.com

▼

Host Name

User Name

Password

Verify Password

Timeout

24

(hours)

Back

Next

Cancel

Enter a name for your camera. Click **Next** to continue.

Step 3: IP camera Name Settings

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

IP camera Name

DCS-5029L

Back

Next

Cancel

Select the Time Zone that corresponds to your camera’s location to ensure that all events are triggered, captured, and scheduled at the right time. Click **Next** to continue.

Step 4: Setup Time Zone

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

Time Zone

(UTC-12:00) International Date Line West

▼

Enable Daylight Saving

☐

Back

Next

Cancel

This page displays a summary of your settings. Click **Apply** to save and activate your settings. (Click **Back** if you need to change your settings.)

Step 5: Setup complete

Below is a summary of your IP 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 IP camera on the network or via your web browser.

IP Address

DHCP

IP camera Name

DCS-TEST

Time Zone

(UTC-12:00) International Date Line West

DDNS

Disable

PPPoE

Disable

Back

Apply

Cancel

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

Refer to [“Motion Detection” on page 46](#) for more information about how to configure motion detection.

Step 2

Select **Always** to always detect motion. Otherwise, for motion detection based on a customized schedule, click **From** and specify the day(s) and hours.

Welcome To D-LINK Setup Wizard - Motion Detection

This wizard will guide you through a step-by-step process to configure your IP camera's motion detection functions. To setup the IP camera LAN or Internet settings, please click on the Back button to close this wizard and re-open the IP camera Setup wizard. Otherwise click on the Next button to begin.

- Step 1: Specify Motion Detection Area Settings
- Step 2: Motion Detection Schedule
- Step 3: Alerts and Notifications

Back Next Cancel

Step 1: Specify Motion Detection Area Settings

This section will allow you to enable or disable motion detection as well as control the sensitivity of your camera's ability to detect movement.

☒ Enable Video Motion ☐ Snapshot ☒ Video Clip

2014/03/09 01:45:00
000-00000

Sensitivity
85 0~100%

Percentage
5 0~100%

Back Next Cancel

step 2: Motion Detection Schedule

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.

☒ Sun ☒ Mon ☒ Tue ☒ Wed ☒ Thu ☒ Fri ☒ Sat

Time

☒ Always

☐ From 00 00 To 23 59

Back Next Cancel

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.

Enter the corresponding information for your e-mail or FTP account.

Click **Next** to continue.

Step 3: Alerts and Notification

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.

☐ Do not notify me

☐ Email

Sender email address

Recipient email address

Server address

User name

Password

Port

25

☐ FTP

Server address

Port

User name

Password

Remote folder name

21

Back

Next

Cancel

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 completed your IP 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

EVENT :

Video Clip

Schedule Day :

Sun ,Mon ,Tue ,Wed ,Thu ,Fri ,Sat ,

Schedule Time :

Always

Alerts and Notification :

Do not notify me

Back

Apply

Cancel

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

Network Setup

This section allows you to configure the network settings for your camera.

DHCP: Select this connection type if you have a DHCP server running on your network and would like a dynamic IP address to be assigned to your camera automatically.

Static IP Client: Select this connection type if your Internet Service Provider (ISP) or network administrator has provided you with a static or fixed IP address and other network information for your camera.

IP Address: Enter the fixed IP Address for your camera.

Subnet Mask: Enter the Subnet Mask for your network. This value is used to determine if the destination is in the same subnet as host devices. The default value is 255.255.255.0.

Default Router: Enter the address for the gateway used to forward data to destinations in a different subnet. Invalid gateway settings may cause the failure of transmissions.

Primary DNS: Enter the IP address for the primary domain name server that translates names to IP addresses.

Secondary DNS: Enter the IP address for the secondary domain name server to backup the Primary DNS.

Enable UPnP presentation: Check to enable UPnP settings and allow you to configure your camera as a UPnP (Universal Plug and Play) device in the network.

Enable UPnP Port Forwarding: If you enable UPnP port forwarding, it will allow the camera to communicate with a UPnP compatible network router for simplified local network access and remote access using the Internet.

Enable PPPoE Settings: If your camera is directly connected to the Internet through a DSL modem, you may connect to the Internet using PPPoE. Click on **Enable** and enter the **User Name** and **Password** provided to you by your ISP or network administrator.

PPPoE Status: Displays the PPPoE status as either *active* or *inactive*.

D-Link

DCS-5029L // LIVE VIDEO SETUP ADVANCED MAINTENANCE STATUS HELP

NETWORK SETUP

You can configure your LAN and Internet settings here.

Save Settings Don't Save Settings

LAN SETTINGS

☒ DHCP

☐ Static IP Client

IP address: 192.168.0.111

Subnet mask: 255.255.255.0

Default router: 192.168.0.1

Primary DNS: 192.168.0.1

Secondary DNS: 8.8.8.8

☒ Enable UPnP presentation

☐ Enable UPnP port forwarding

Forwarding Port: 8080 / 8080

Forwarding Status: UPnP forwarding is inactive

PPPoE SETTINGS

☐ Enable ☒ Disable

User Name:

Password:

Confirm password:

PPPoE Status: PPPoE is inactive.

HTTP

HTTP port: 80

Access name for stream1: video1.mjpg

Access name for stream2: video2.mjpg

Access name for stream3: video3.mjpg

HTTPS

HTTPS port: 443

RTSP

Authentication: Digest

RTSP port: 554

Access name for stream1: live1.sdp

Access name for stream2: live2.sdp

Access name for stream3: live3.sdp

QoS SETTINGS

☐ Enable QoS

VLAN ID: 1 [0-4095]

Live video: 0

Live audio: 0

Event/Alarm: 0

Management: 0

QOS SETTINGS

☐ Enable QoS

Live video: 0

Live audio: 0

Event/Alarm: 0

Management: 0

IPv6

☐ Enable IPv6

IPv6 Information:

Manually setup the IP address

Optional IP address / Prefix length: / 64

Optional default router:

Optional primary DNS:

MULTICAST

☐ Enable multicast for stream 1

Multicast group address: 224.0.0.1

Multicast video port: 8000

Multicast RTCP video port: 8001

Multicast audio port: 8002

Multicast RTCP audio port: 8003

Multicast TTL [1-255]: 64

☐ Enable multicast for stream 2

Multicast group address: 224.0.0.2

Multicast video port: 8004

Multicast RTCP video port: 8005

Multicast audio port: 8006

Multicast RTCP audio port: 8007

Multicast TTL [1-255]: 64

☐ Enable multicast for stream 3

Multicast group address: 224.0.0.3

Multicast video port: 8008

Multicast RTCP video port: 8009

Multicast audio port: 8010

Multicast RTCP audio port: 8011

Multicast TTL [1-255]: 64

Save Settings Don't Save Settings

Helpful Hints...

Select DHCP: Connected if you are running a DHCP server on your network and would like the IP address assigned to your IP camera automatically.

When enabling UPnP: UPnP settings will allow you to configure your IP camera as an UPnP device in the network.

PPPoE Settings: If you use the IP camera to connect directly to the Internet, you will need to enter the username and password, which were given to you when you set up your account with your Internet Service Provider. If the camera is behind a router or a gateway, you do not need to configure this setting.

HTTP: HTTP Port is the port you allocate in order to connect to the IP camera via a standard web browser.

HTTPS: HTTPS Port is a port you allocate in order to connect to the IP camera via a secure web browser.

RTSP: RTSP Port is the port you allocate in order to connect to the IP camera by using a streaming media device (e.g., such as a media player or PDA).

QoS (Quality of Service): Consistent network traffic control is required for the QoS mechanism. Quality of service guarantees are required if the network capacity is insufficient, especially for real-time streaming multimedia applications.

IPv6 (Quality of Service): IPv6 provides traffic control, a resource reservation control mechanism. Quality of service guarantees are required if the network capacity is insufficient, especially for real-time streaming multimedia applications.

Enable IPv6: Select this option to enable IPv6. Please note that this only works if your network environment and hardware equipment support IPv6. The browser should be Internet Explorer 6.0, Mozilla Firefox 3.0 or above. By default, the network camera will listen to route advertisements and be assigned a local IPv6 address accordingly.

IPv6 Information: Click this button to obtain the IPv6 information. If your IPv6 setting are successful, the IPv6 address list will be listed in the top of the window. Please follow the steps below to link to an IPv6 address:

- 1) Open your web browser.
- 2) Enter the link global or link local IPv6 address in the address bar of your web browser.
- 3) Press Enter on the keyboard or click Refresh button to refresh the webpage.

Manually setup the IP: Please note that this option is mainly for configuring IPv6 settings if your network environment does not have DHCPv6 server and advertisement-enabled routers.

Multicast: Click the button to display the detailed configuration information. Select the Always multicast option to make multicast for stream 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255.

Multicast RTP video, audio port (Multicast RTP video, audio port): The port can be changed to values between 1024 and 65534. The multicast RTP port must be an even number and the multicast RTCP port

- HTTP Port:** You may configure a second HTTP port that will allow you to connect to the camera using a standard Web browser. The port can be set to a number other than the default TCP port of 80. A corresponding port must be opened on the router. For example, if the port is changed to 1010, users must type **http://192.168.0.100:1010** instead of *http://192.168.0.100*.
- 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:** Click the drop-down menu to enable authentication of RTSP (Real Time Streaming Protocol).
- 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.
- Access Name for Stream 1~3:** 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:** Check to enable CoS (Class of Service), which implements assignment of priority using a best-effort policy without making any bandwidth reservations.
- Enable QoS:** Check to enable QoS (Quality of Service), which 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 IP address, specify an optional IP address, specify an optional router and an optional primary DNS.
- Enable Multicast for stream:** The DCS-5029L allows you to multicast each of the available streams using a group address. You can 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 default settings.

Click **Save Settings**.

HTTP	
HTTP port	80
Access name for stream1	video1.mjpg
Access name for stream2	video2.mjpg
Access name for stream3	video3.mjpg

HTTPS	
HTTPS port	443

RTSP	
Authentication	Digest
RTSP port	554
Access name for stream1	live1.sdp
Access name for stream2	live2.sdp
Access name for stream3	live3.sdp

COS SETTINGS	
<input type="checkbox"/> Enable CoS	
VLAN ID	1 [0~4095]
Live video	0
Live audio	0
Event/Alarm	0
Management	0

QOS SETTINGS	
<input type="checkbox"/> Enable QoS	
Live video	0
Live audio	0
Event/Alarm	0
Management	0

IPV6	
<input type="checkbox"/> Enable IPv6	
<input type="button" value="IPv6 Information"/>	
<input type="checkbox"/> Manually setup the IP address	
Optional IP address / Prefix length	/ 64
Optional default router	
Optional primary DNS	

MULTICAST	
<input type="checkbox"/> Enable multicast for stream 1	
Multicast group address	239.1.1.1
Multicast video port	6550
Multicast RTP video port	6551
Multicast audio port	6552
Multicast RTP audio port	6553
Multicast TTL [1~255]	64
<input type="checkbox"/> Enable multicast for stream 2	
Multicast group address	239.1.1.2
Multicast video port	6554
Multicast RTP video port	6555
Multicast audio port	6556
Multicast RTP audio port	6557
Multicast TTL [1~255]	64
<input type="checkbox"/> Enable multicast for stream 3	
Multicast group address	239.1.1.3
Multicast video port	6558
Multicast RTP video port	6559
Multicast audio port	6560
Multicast RTP audio port	6561
Multicast TTL [1~255]	64

Wireless Setup

This section allows you to set up and configure the wireless settings on your camera.

Enable Wireless: Check the box to allow your camera to connect to your network wirelessly.

Site Survey: Click **Rescan** to scan for an available wireless network. Then click the drop-down menu to select a wireless network.

SSID: Displays the *SSID* (network name) of the wireless network you want to connect to.

Wireless Mode: Select the connection mode used by your wireless network. In most cases, you should select **Infrastructure**. **Ad-Hoc** is only used if your camera is directly connecting to another PC or device without the use of a router or access point.

Channel: If you are using **Ad-Hoc** mode, select the same channel that is being used by your wireless network, or select **Auto**.

Authentication: Select the wireless security mode used by your wireless network.

Encryption: If you select **WPA-PSK** or **WPA2-PSK** for your authentication type, you must specify what type of encryption your wireless network uses.

Key: If you select **WPA-PSK** or **WPA2-PSK** for your authentication type, enter the **Key** (also known as password) for your wireless network.

Click **Save Settings**.

The screenshot shows the D-Link DCS-5029L Web Setup Wizard. The top navigation bar includes tabs for LIVE VIDEO, SETUP (selected), ADVANCED, MAINTENANCE, STATUS, and HELP. The left sidebar lists various setup options: Setup Wizard, Network Setup, Wireless Setup (selected), Dynamic DNS, Image Setup, Audio and Video, PTZ Setup, Motion Detection, Sound Detection, Time and Date, Event Setup, SD Card, and Logout. The main content area is titled 'WIRELESS SETUP' and contains the following fields and options:

- Enable Wireless:** A checked checkbox.
- Site Survey:** A button labeled 'Rescan' next to a dropdown menu showing 'SSID List'.
- SSID:** A text field containing 'dlink-E6CC'.
- Wireless Mode:** A dropdown menu set to 'Infrastructure'.
- Channel:** A dropdown menu set to 'Auto'.
- Authentication:** A dropdown menu set to 'WPA2-PSK'.
- Encryption:** A dropdown menu set to 'TKIP,AES'.
- Key:** A text field with masked characters (asterisks) and a note '(8-63 ASCII or 64 HEX characters)'.

At the bottom of the main content area are two buttons: 'Save Settings' and 'Don't Save Settings'. On the right side, there is a 'Helpful Hints...' section with text explaining SSID, Authentication, and Shared settings.

Dynamic DNS (DDNS)

This section allows you to configure the DDNS (Dynamic Domain Name Server) settings for your camera. DDNS will allow users to access your camera using a domain name instead of an IP address.

Enable DDNS: Check to enable the DDNS function.

Server Address: Select your **Dynamic DNS Server** from the drop-down menu.

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 server.

Password: Enter your **Password** used to connect to the DDNS server.

Timeout: This allows you to specify the periodic update time for notifying the DDNS server of the camera's current IP address.

Status: Displays the connection status as *Active* or *Inactive*.

Click **Save Settings**.

D-Link

DCS-5029L // LIVE VIDEO SETUP ADVANCED MAINTENANCE STATUS HELP

Setup Wizard
Network Setup
Wireless Setup
Dynamic DNS
Image Setup
Audio and Video
PTZ Setup
Motion Detection
Sound Detection
Time and Date
Event Setup
SD Card
Logout

DYNAMIC DNS

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

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

Save Settings Don't Save Settings

DYNAMIC DNS SETTING

Enable DDNS ☐

Server Address <<

Host Name

User Name

Password

Verify Password

Timeout (hours)

Status

Save Settings Don't Save Settings

SECURITY

Helpful Hints..

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

Image Setup

This section allows you to configure the image settings for your camera.

Enable Privacy Mask Setting: Check the box to enable the privacy mask function. This allows you to specify rectangular areas on the screen that should be blocked from recording and taking snapshots with your DCS-5029L.

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

Disable All: Disables all mask areas.

Enable All: Enables all mask areas.

Reset All: Clears all mask areas.

Anti Flicker: If you notice flickering when you view the image from your camera, click **On** to enable anti flicker. Otherwise, you can leave this feature disabled.

Mirror: Click **On** to flip the image horizontally.

Flip: Click **On** to flip the image vertically.

Note: If the camera is installed upside down, Flip Image and Mirror should both be enabled.

Power Line: Select the frequency used by your power lines so you can avoid interference.

White Balance: Use the drop-down menu to change the white balance settings to help balance colors in different lighting environments.

Exposure Mode: Use the drop-down menu to change the exposure mode. Set the camera for **Indoor**, **Outdoor**, or **Night** environments. Or select **Moving** to capture moving objects. The **Low Noise** option will focus on creating a high-quality picture without noise. You can also create three 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: Select a number from the drop-down menu representing the amount of noise reduction that will be applied to the picture.



Brightness: Adjust this setting to control th brightness of the camera image.

Contrast: Adjust this setting to alter the contrast of the camera image.

Saturation: Adjust the color saturation level.

Sharpness: Select a number from 0 to 8 to specify how much sharpening to apply to the image.

Mount Type: Select the mount type ,either **Ceiling** or **Desktop**, to ensure the PTZ controls respond accurately.

IMAGE SETTINGS

Anti Flicker

☐ On ☒ Off

Mirror

☐ On ☒ Off

Flip

☐ On ☒ Off

Power Line

☒ 60 Hz ☐ 50 Hz

White Balance

Auto

Exposure Mode

Auto

Max Gain

24

dB

Denoise

0

Brightness

4

Contrast

4

Saturation

128

Sharpness

4

Mount type

Desktop

Reset Default

Audio and Video

You may configure up to three video profiles for your camera. Hence, you can have a profile for viewing content from a PC, and another for viewing content from a mobile device.

Aspect Ratio: Select the aspect ratio for the video to either 4:3 (standard) or 16:9 (widescreen).

Mode: Set the video codec to **H.264** or **JPEG**.

Frame size: Frame size determines the total capture resolution.

16:9	1280 x 720, 800 x 448, 640 x 360, 480 x 272, 320 x 176
4:3	960 x 720, 800 x 592, 640 x 480, 480 x 352, 320 x 240

Maximum frame rate: Selecting a higher frame rate results in smoother motion in videos, but requires more bandwidth. Lower frame rates require less bandwidth, but video will appear to be stuttering or “choppy”.

Video Quality: This limits the *Maximum frame rate*, which can be combined with the *Fixed quality* 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.

Constant bit rate: Click the radio button to select **Constant bit rate** and use the drop-down menu to select the desired fixed bandwidth.

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

Audio in off: Check this check box to mute incoming audio.

Audio in gain level: Select a number from the drop-down menu representing the amount of gain applied to incoming audio. A higher number increases volume.

Audio out off: Check this check box to mute outgoing audio.

Audio out volume level: Select a number from the drop-down menu representing the amount of gain applied to outgoing audio. A higher number increases volume.

Click **Save Settings**.

D-Link

DCS-5029L // LIVE VIDEO SETUP ADVANCED MAINTENANCE STATUS HELP

AUDIO AND VIDEO

This section allows you to configure the sound and video of your camera. You can configure different settings depending on whether you are viewing content from a PC or a Mobile Phone / PDA.

Save Settings Don't Save Settings

VIDEO SETTINGS

Aspect ratio: 16:9 **Warning: Change the aspect ratio will clear the settings of privacy mask and preset and motion detection.**

Save Default

VIDEO PROFILE 1

Mode: H.264

Frame size: 1280x720

Maximum frame rate: 30

Video quality: Constant bit rate (selected) 1M Fixed quality Excellent

VIDEO PROFILE 2

Mode: JPEG

Frame size: 640x360

Maximum frame rate: 30

Video quality: Excellent

VIDEO PROFILE 3

Mode: H.264

Frame size: 320x176

Maximum frame rate: 30

Video quality: Constant bit rate (selected) 512K Fixed quality Excellent

AUDIO SETTINGS

☐ Audio in off

Audio in gain level: 20dB

☐ Audio out off

Audio out volume level: 7

Save Settings Don't Save Settings

SECURITY

Helpful Hints..

Higher frame size, frame rate and bit rate gives better video quality. At the same time, it requires more network bandwidth.

For best viewing results on a mobile phone, we suggest setting the Frame Rate to 30ps and the Bit Rate to 64 kbps.

Aspect Ratio: An aspect ratio is the ratio between the width and height of an image.

Mode: It can be H.264, JPEG, or MPEG4. In JPEG mode, the video frames are independent; MPEG4 consumes much less network bandwidth than JPEG, and H.264 can use less bandwidth but better image quality.

Frame Size: 5 options exist for the sizes of the video display. It is recommended using 320x176 for mobile viewing and 1280x720 for computer viewing.

View window area: The viewing region of the current video stream.

Max frame rate: The maximum number of frames that is displayed in 1 second. 30fps is the highest video quality for this camera. In general, any frame rate above 15 fps is imperceptible to the human eye.

Video Quality: This limits the maximal refresh frame rate, which can be combined with the "Fixed quality" to optimize the bandwidth utilization and video quality. If the User wants to fix the bandwidth utilization regardless of the video quality, choose "Constant bit rate" and select the desired bandwidth.

Audio Settings: You can use the option to switch the external microphones on/off or adjust the volume.

PTZ Setup

This section allows you to configure the pan and tilt operations for your camera. You can set the lens location for the Home (+) button, and specify up to 24 pre-set points, allowing you to view these pre-determined areas from the Live Video screen. You can also create preset sequences.

Pan Step: Select the increment of movement for each press of a pan (up/down) arrow on the PTZ Control. (A low number for slower pan speed, and a high number for a faster pan speed.)

Tilt Step: Select the increment of movement for each press of a tilt (left/right) arrow on the PTZ Control. (A low number for slower tilt speed, and a high number for a faster tilt speed.)

Preset No: Select an available number from the drop-down menu for the preset point you want to create. (Available numbers will be listed as “nonsetting”).

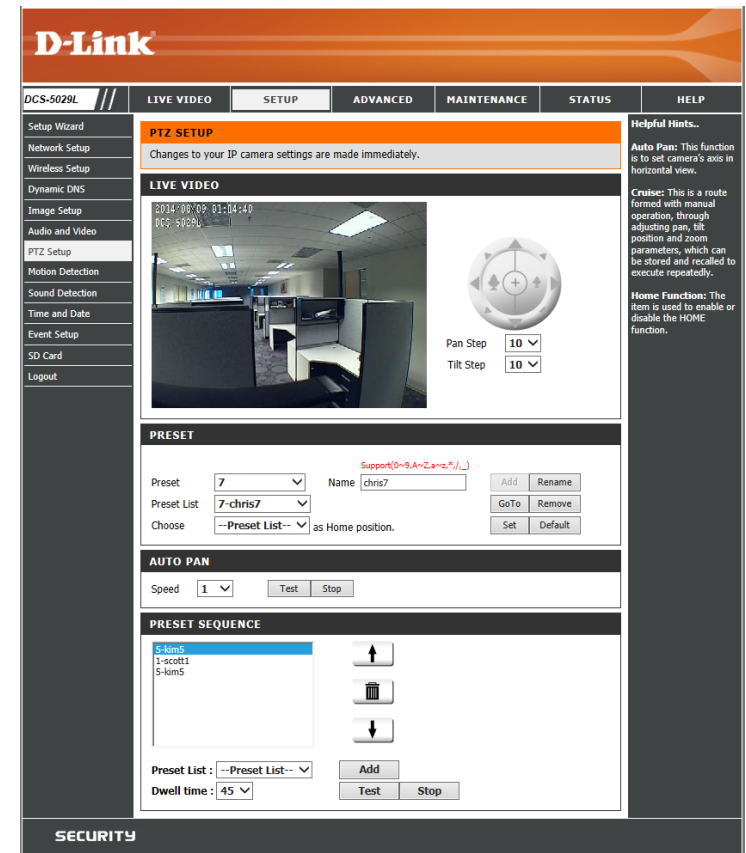
Preset Name: Enter a name for your new preset. point Use the PTZ Control to set the view you want to assign to the preset, and click **Add**. If you select an existing *Preset Name* from the *Preset List*, you can change the name by typing in a new name and then clicking **Rename**.

Preset List: Click on the drop-down menu to view the list of preset points. You can select a name from this list to **Rename** or **Remove** from the list.

Choose as Home: Select a name from the drop-down menu and click **Set** to assign the selected preset point as the Home (+) position.

Auto Pan Speed: Select a number from the drop-down menu representing the speed at which the camera will pan. You can choose a value between 0 and 10, with 0 being the slowest. Click the **Test** button to view the camera movement at the selected pan speed.

Proceed to the next page for instructions for creating a preset sequence.



Preset Sequence: Create a preset sequence, which will automatically move the camera's view from one preset point to another.

To add a preset to the sequence, select it from the drop-down menu at the bottom of the *Preset Sequence* window, and then click the **Add** button to the right. The preset name will appear in the box below the *Preset Sequence* heading. After you add the final preset, make sure you select a **Dwell time** from the drop-down menu, and then click **Add**. The selected Dwell time will be applied to all preset points in the sequence.

To remove a preset from the sequence, select the preset name and click the **trash** icon. You can rearrange your preset points in the sequence by selecting a preset name, and then clicking the arrow buttons to the right to move the preset name higher or lower in the sequence.

When you have the preset points in the preferred order, you can click the **Test** button to view the preset sequence.

The screenshot displays the camera configuration interface with three main sections:

- PRESET**: Contains a 'Preset' dropdown menu (currently showing '--Preset No--'), a 'Name' text input field, and a 'Support(0~9,A~Z,a~z,*,/,_)' note. To the right are 'Add', 'Rename', 'GoTo', and 'Remove' buttons. Below these is a 'Choose' dropdown menu (showing '--Preset List--') and the text 'as Home position.' with 'Set' and 'Default' buttons.
- AUTO PAN**: Features a 'Speed' dropdown menu (set to '1') and 'Test' and 'Stop' buttons.
- PRESET SEQUENCE**: Includes a large empty box for the sequence list, three vertical arrow buttons (up, trash, down) for rearranging items, a 'Preset List' dropdown menu (showing '--Preset List--'), a 'Dwell time' dropdown menu (set to '15'), and 'Add', 'Test', and 'Stop' buttons.

Motion Detection

This section allows you to set up motion detection on your DCS-5029L. You can define a specific area that will be monitored by your camera.

Enable Video Check this box to enable the motion detection feature of your camera.
Motion: Then you will be able to use your mouse to define the area you want the camera to monitor for motion. (See *Drawing Mode* below.)

Enable PIR: Check this box to use the PIR sensor (passive infrared) to detect motion.

Sensitivity: This setting adjusts how sensitive the camera will be to motion. 100% will be the most sensitive setting and 0% will be the least sensitive setting.

Percentage: This setting adjusts the amount of area being monitored that will trigger an alert. If set at 100%, motion detected anywhere within the window will trigger an alert.

Drawing Mode: To define the part of the picture that you want the camera to monitor for movement, first click and drag your mouse over the image area to bring up the grid. Click on the blocks within the grid where you would like to monitor for motion. If you need to de-select the blocks and draw a new grid, just right-click to access the drop-down menu and click **Clear All**. When you have defined the area correctly that you wish to monitor, click **Save Settings**.

The red grid shown on the right indicates the area that has been selected for motion detection. When motion is detected within this area, you will see the *Motion* icon blinking orange from the Live Video screen. (See orange icon below.)

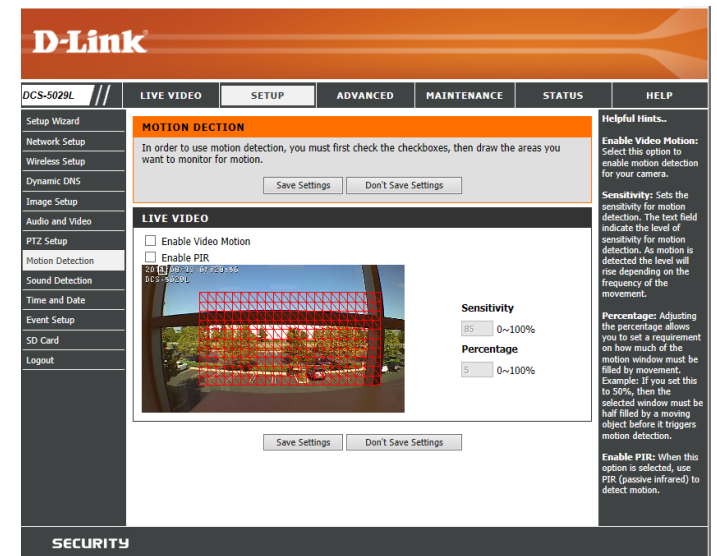
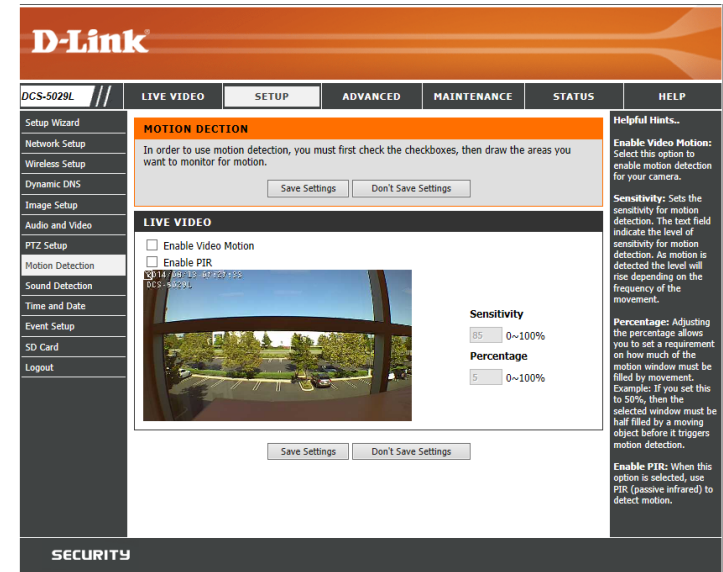


No Motion



Motion

The *Motion* icon on the Live Video screen will continue blinking orange as long as motion is detected.



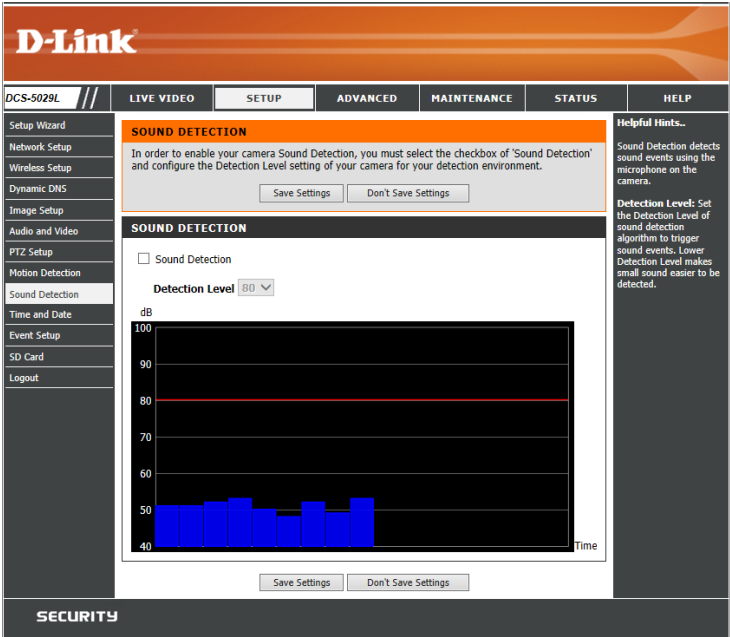
Sound Detection

Enabling Sound Detection will allow your camera to use the built-in microphone to trigger events with audio, which can be used to trigger snapshots or recordings.

Sound Detection: Check this box to enable the sound detection feature of your camera.

Detection Level: Specifies the measurable detection level. When the sound level exceeds the detection level, the camera will trigger an event. Enter a value between 50 and 90. The higher the number, the less sensitive the camera will be.

Click **Save Settings**.



Time and Date

This section allows you to configure the settings of the internal system clock for your camera.

Time Zone: Select the **Time Zone** for your region from the drop down menu.

Enable Daylight Saving: Click to enable Daylight Saving Time (DST).

Auto Daylight Saving: Click this option if you want the clock to be automatically adjusted according to the DST of the selected **Time Zone**.

Set date and time manually: Click to set DST manually. You can select a time **Offset** using the drop-down menu, or enter a **Start time** and **End time** with the **Month**, **Week**, **Day of Week**, **Hour**, and **Minutes**.

Synchronize with NTP Server: Enabling this option will allow the camera to update its system clock automatically from an NTP server.

NTP Server: When *Synchronize NTP Server* is enabled, you can select the **NTP Server** closest to your location from the drop-down menu.

Set the Date and Time Manually: When *Synchronize NTP Server* is not enabled, you can set the date and time of the internal system clock manually. Or you can click on **Copy Your Computer's Time Settings** to automatically set the date and time based on your computer's settings.

Click **Save Settings**.

The screenshot shows the D-Link DCS-5029L web interface. The top navigation bar includes links for LIVE VIDEO, SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The left sidebar lists various setup options: Setup Wizard, Network Setup, Wireless Setup, Dynamic DNS, Image Setup, Audio and Video, PTZ Setup, Motion Detection, Sound Detection, Time and Date (selected), Event Setup, SD Card, and Logout.

The main content area is titled "TIME AND DATE" and contains the following sections:

- TIME CONFIGURATION:**
 - Time Zone: (UTC+08:00) Taipei
 - ☐ Enable Daylight Saving
 - ☒ Auto Daylight Saving
 - ☒ Set date and time manually
 - Offset: +2:00
 - Start time: Month 5, Week 1, Day of week Sunday, Hour 00, Minutes 00
 - End time: Month 10, Week 1, Day of week Sunday, Hour 00, Minutes 00
- AUTOMATIC TIME CONFIGURATION:**
 - ☒ Synchronize with NTP Server
 - NTP Server: ntp1.dlink.com << Select NTP Server
- SET DATE AND TIME MANUALLY:**
 - ☐ Set date and time manually
 - Year: 2014, Month: 8, Day: 9, Hour: 1, Minute: 18, Second: 15
 - Copy Your Computer's Time Settings

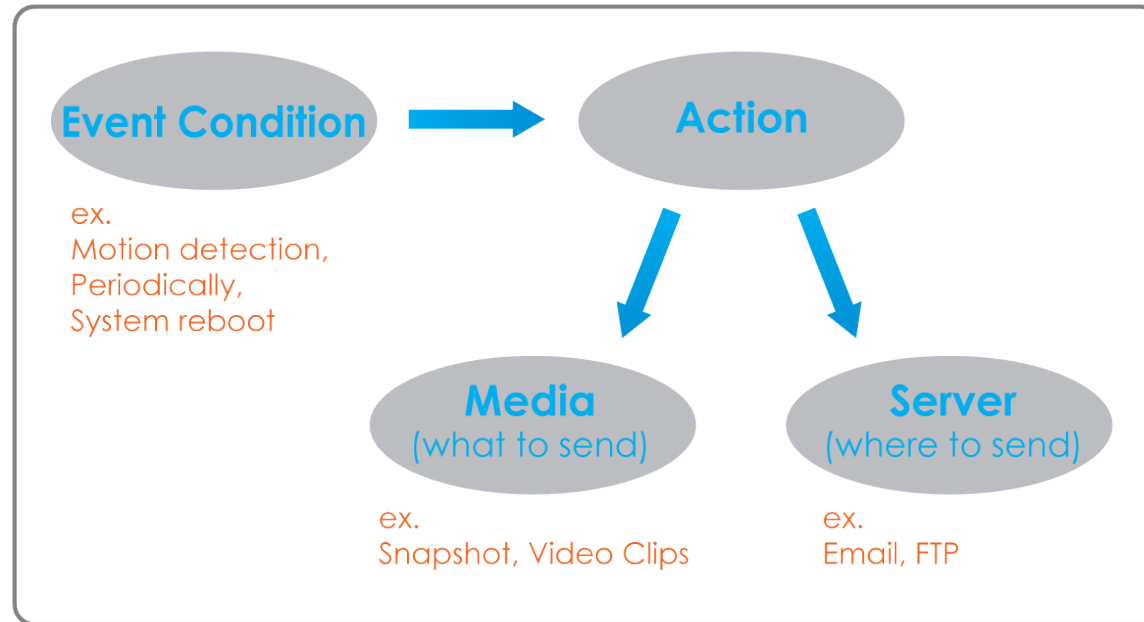
At the bottom of the main content area are "Save Settings" and "Don't Save Settings" buttons.

On the right side, there is a "Helpful Hints..." section with the following text:

- Time Zone:** Select your time zone from the drop-down menu.
- Enable Daylight Saving:** Select this to enable the daylight saving time.
- Auto Daylight Saving:** When you select it, the clock is automatically adjusted according to the daylight saving time of the selected time zone.
- Offset:** Select the time offset, if your location observes daylight saving time.
- Synchronize with NTP Server:** With the option selected, the camera will synchronize the time settings with the NTP server over the Internet whenever the camera starts up. If the timeserver cannot be reached, no time settings will be applied.
- NTP Server:** Network Time Protocol (NTP) synchronizes the IP camera with an Internet time server. Choose the one that is closest to your location.
- Copy Your Computer's Time Settings:** This will synchronize the time.

Event Setup

In a typical application, when motion is detected, the DCS-5029L sends images to a FTP server, using e-mail for event notification. As shown in the diagram below, an event can be triggered by various sources, such as motion detection or external digital input devices. When an event is triggered, a specified action will be performed. You can configure the camera to send snapshots or videos to your e-mail address or to an FTP server.



To start plotting an event, we suggest that you configure *Server* and *Media* columns first so that the network camera will know what action will be performed when a trigger is activated.

Section 4 - Configuration

The Event Setup page includes these four sections:

- Server
- Media
- Event
- Recording

1. To add a new item, start with **Server** or **Media** first. Click **Add**. A corresponding screen will appear, and you will be able to specify an event trigger and a specified action.
2. To delete an item, select the name from the drop-down menu of *Server*, *Media*, *Event*, or *Recording* and click **Delete**.
3. To edit an item, click on the item name and a window will open for modifying the selected item.

DCS-5029L

LIVE VIDEO

SETUP

ADVANCED

MAINTENANCE

STATUS

HELP

Setup Wizard

Network Setup

Wireless Setup

Dynamic DNS

Image Setup

Audio and Video

PTZ Setup

Motion Detection

Sound Detection

Time and Date

Event Setup

SD Card

Logout

EVENT SETUP

There are four sections in Event Setup page. They are event, server, media and recording. Click Add to pop a window to add a new item of event, server, media or recording. Click Delete to delete the selected item from event, server, media or recording. Click on the item name to pop a window to edit it. There can be at most 2 events and 1 recording. There can be at most 5 server and 5 media configurations.

SERVER

Name	Type	Address/Location
test	SD card	
<div>Add</div>	<div>test</div>	<div>Delete</div>

MEDIA

Name	Type	Source
test	Video clip	Profile 1
<div>Add</div>	<div>test</div>	<div>Delete</div>

EVENT

Name	Status	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Time	Trigger
test	ON	V	V	V	V	V	V	V	00:00~23:59	Motion
<div>Add</div>	<div>test</div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>

RECORDING

Name	Status	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Time	Source	Destination
test	ON	V	V	V	V	V	V	V	00:00~23:59	Profile 1	SD
<div>Add</div>	<div>test</div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>

Helpful Hints..

Suggest setting server and media first before setting event. The servers and media which selected in event list are not be able to modify or delete. Please remove them first from the event if you want to delete or modify them. Recommend using different media in different event to make use all media be produced and received correctly. If using the same media in different events and the events trigger almost simultaneously, the servers in the second triggered event will not receive any media; there would be only notifications.

SECURITY

Add Server

You can configure up to five 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.

Click **Save Settings**.

SERVER
You can set at most 5 different servers here for different event.

SERVER TYPE
Server Name:
☒ **Email**
Sender email address
Recipient email address
Server address
User name
Password
Port
☐ This server requires a secure connection (StartTLS)
☐ **FTP**
Server address
Port
User name
Password
Remote folder name
☒ Passive mode
☐ **Network storage**
Network storage location
(for example: \\my_nas\disk\folder)
Workgroup
User name
Password
Primary WINS server
☐ **SD Card**

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 page 43](#) for more information on video profiles.

Send pre-event image(s) [0~3]: Set the number of pre-event images for the camera to take. Pre-event images are images taken before the main event snapshot is taken. You can set up to three pre-event images.

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

File name prefix: Enter the prefix name to be added to the file name.

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

Video Clip: Select this option to set the media type to video clips. Set the video profile to use as the media source. Refer to [“Audio and Video” on page 43](#) for more information on video profiles.

Pre-event recording: Set the number of seconds to record before the main event video clip starts. You can record up to three seconds of pre-event video.

MEDIA

You can set at most 5 different media here for different event.

Save Settings
Don't Save Settings

MEDIA TYPE

Media name:

☒ Snapshot
 Source:

Send pre-event image(s) [0~3]

Send post-event image(s) [0~7]

File Name Prefix:

☐ Add date and time suffix to file name

☐ Video Clip
 Source:

Pre-event recording: Second(s) [0~3]

Maximum duration: Second(s) [1~100]

Maximum file size: Kbytes [100~5000]

File Name Prefix:

☐ System log

Save Settings
Don't Save Settings

Maximum duration: Set the maximum length (in seconds) of video to record for your video clips.

Maximum file size: Set the maximum file size (in Kbytes) for your video clips.

File name prefix: This is the prefix that will be added to the filename of saved 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.

Click **Save Settings**.

MEDIA TYPE

Media name:

☒ Snapshot

Source:

Send pre-event image(s) [0~3]

Send post-event image(s) [0~7]

File Name Prefix:

☐ Add date and time suffix to file name

☐ Video Clip

Source:

Pre-event recording: Second(s) [0~3]

Maximum duration: Second(s) [1~100]

Maximum file size: Kbytes [100~5000]

File Name Prefix:

☐ System log

Add Event

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

Event name: Enter a name for the event.

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

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

Delay: Enter the delay time (in seconds) before checking for the next event. It is used for events of motion detection type, as well as for triggers like digital input and passive infrared sensor.

Trigger: Specify the input type that triggers the event.

Video Motion Detection: Triggers an event when motion is detected.

Periodic: The event is triggered in specified intervals. The trigger interval unit is in minutes.

Digital input: The external digital input triggers an event.

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

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

Passive Infrared Sensor: Triggers an event when the PIR sensor is activated by moving infrared objects, even in a dark environment.

Sound Detection: Triggers an event when sound is detected.

EVENT

You can set at most 2 events like motion detection or digital input trigger here and arrange the detection schedule at the same time.

Save Settings
Don't Save Settings

EVENT

Event name:

☐ Enable this event

Priority: normal

Delay for seconds before detecting next event [For motion detection and digital input and Passive Infrared sensor]

TRIGGER

☒ Video motion detection

☐ Periodic
Trigger every minutes

☐ Digital input

☐ System boot

☐ Network lost

☐ Passive Infrared sensor

☐ Sound Detection

EVENT SCHEDULE

☒ Sun ☒ Mon ☒ Tue ☒ Wed ☒ Thu ☒ Fri ☒ Sat

Time

☒ Always

☐ From To

ACTION

☐ Trigger D/O for seconds

Save Settings
Don't Save Settings

Event Schedule: Check the boxes by the days of the week that you would like to schedule the event.

Time: Select **Always** for 24 hours per day, or select **From** and enter the time interval using the drop-down menu.

Trigger D/O: Check the box to trigger the digital output for a specific number of seconds when an event occurs.

Click **Save Settings**.

TRIGGER

☒ Video motion detection

☐ Periodic
Trigger every minutes

☐ Digital input

☐ System boot

☐ Network lost

☐ Passive Infrared sensor

☐ Sound Detection

EVENT SCHEDULE

☒ Sun ☒ Mon ☒ Tue ☒ Wed ☒ Thu ☒ Fri ☒ Sat

Time

☒ Always

☐ From To

ACTION

☐ Trigger D/O for seconds

Save Settings

Don't Save Settings

D-Link DCS-5029L User Manual

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Add Recording

Set up a schedule for recording video and saving the file. After making any changes, click the **Save Settings** button to save your changes.

Recording entry name: Enter the unique name for the entry.

Enable this recording: Check this box to enable the recording function.

Priority: Set the priority for this entry. The entry with a higher priority value will be executed first.

Source: Set the profile to use as the recording source. Refer to [“Audio and Video” on page 43](#) for more information on video profiles.

Recording Schedule: Check the boxes by the days of the week that you would like to schedule the recording.

Time: Select **Always** for 24 hours per day, or select **From** and enter the time interval using the drop-down menu.

Recording Settings: The fields in this section allow you to configure the settings for recording video.

Destination: Select **None** if you do not wish to store the recordings, or select a location where the recording file will be stored.

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

RECORDING

You can setup schedule recording to network storage with your specify week day and time period.

Save Settings
Don't Save Settings

RECORDING

Recording entry name:

☐ Enable this recording

Priority: normal

Source: Profile 1

RECORDING SCHEDULE

☒ Sun
☒ Mon
☒ Tue
☒ Wed
☒ Thu
☒ Fri
☒ Sat

Time

☒ Always
☐ From 00 00 To 23 59

RECORDING SETTINGS

Destination None

Total cycling recording size: 1000 Mbytes [200~2000000]

☒ Size of each file for recording: 10 Mbytes
☐ Time of each file for recording: 10 seconds

File Name Prefix:

Save Settings
Don't Save Settings

Note: When you specify the total cycling recording size, make sure that you leave enough HDD space for the size that is specified. Otherwise, the recording will stop.

Section 4 - Configuration

Size of each file for recording: If you select this option, files will be separated based on the file size you specify.

Time of each file for recording: If you select this option, 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).

Click **Save Settings**.

RECORDING SCHEDULE

☒ Sun ☒ Mon ☒ Tue ☒ Wed ☒ Thu ☒ Fri ☒ Sat

Time

☒ Always

☐ From To

RECORDING SETTINGS

Destination

Total cycling recording size: Mbytes [200~2000000]

☒ Size of each file for recording: Mbytes

☐ Time of each file for recording: seconds

File Name Prefix:

Save Settings

Don't Save Settings

SD Card

After you insert and format the microSD card, you will be able to browse and manage the stored files.

Files per Page: Select a number from the drop-down menu representing the number of files to view on this page.

Refresh: Click the link to reload the file and folder information from the microSD card.

Video: If video files are stored on the microSD card, click on the link and locate the file you would like to play back.

Picture: If picture files are stored on the microSD card, click on the link and locate the file you would like to view.

Format SD Card: Click this button and the system will automatically format the microSD card and create folders for pictures and video.

D-Link

DCS-5029L // LIVE VIDEO SETUP ADVANCED MAINTENANCE STATUS HELP

SD CARD

Here you could browse and manage the record files which stored in SD card.

SD CARD

SD Card: / SD Status : Ready

Files per Page: 10 Refresh 1 of 1

<input type="checkbox"/> Delete	File	Num of files	Size
<input type="checkbox"/>	Video	1	
<input type="checkbox"/>	Picture	0	

Format SD Card Total:995912KB, Used:642596KB, Free:353316KB OK

Helpful Hints..

Format SD Card: Click this icon, system will automatically format SD card and create "picture" & "video" folders.

View recorded picture: If SD stored recorded picture files, enter picture link and choose which picture file you desire to view. You will view picture via image viewer SW. (ie. Windows Image Viewer)

Playback recorded video: If SD stored recorded video files, enter video link and choose which video file you desire to playback. Windows will guide you to open/download video file (.AVI format) so that you can playback file via video decoder SW (ie. Windows Media Player)

SECURITY

Advanced DI and DO

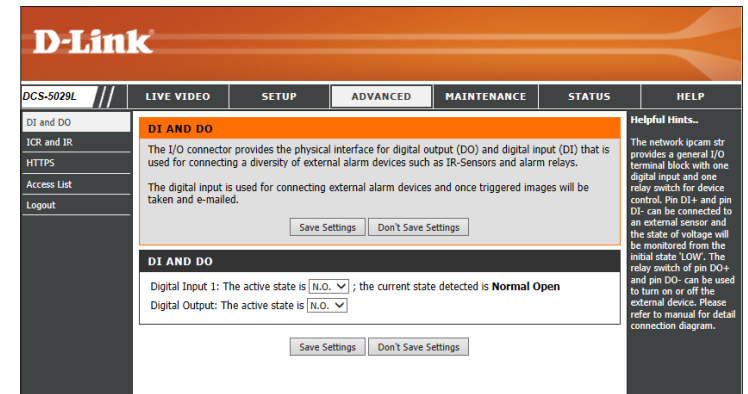
This screen allows you to control the behavior of digital input and digital output devices. The I/O connector provides the physical interface for digital output (DO) and digital input (DI) that is used for connecting a variety of external alarm devices such as IR-Sensors and alarm relays. The digital input is used for connecting external alarm devices. Once an alert is triggered, video will be recorded or snapshots will be taken and alerts will be e-mailed as specified. (Refer to [“Event Setup” on page 49.](#))

D/I and D/O: The camera sends a signal whenever an event is triggered by a digital input or digital output device.

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."

Click **Save Settings**.



ICR and IR

Here you can configure the ICR and IR settings. The IR (Infrared) Cut-Removable (ICR) filter can be removed for increased sensitivity in low-light environments. (The ICR filter blocks IR light when it is inserted.)

Automatic: Click **Automatic**, and 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: Click **Schedule mode**, and then set up the Day/Night mode using a schedule. Select the starting time (**From**) for Day Mode, and the ending time (**To**) for return to Night Mode.

IR Light Control: Select from the options below to enable or disable the IR (infrared) light according to your preferences. This setting provides additional controls depending on your specific application.

Off: Click **Off**, and the IR light will always be off.

On: Click **On**, and the IR light will always be on.

Sync with ICR: Click **Sync with ICR** to synchronize your IR LEDs with the ICR filter. IR lights will come on when the ICR filter is removed.

Schedule: Click **Schedule**, and the IR light will turn on or off according to the schedule that you specify. Select a starting time (**From**) and ending time (**To**) from the drop-down menu.

Click **Save Settings**.

D-Link

DCS-5029L // LIVE VIDEO SETUP ADVANCED MAINTENANCE STATUS HELP

DI and DO
ICR and IR
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ICR AND IR

An IR(Infrared) Cut-Removable(ICR) filter can be disengaged from the image path for increased sensitivity in low light environments. The ICR filter will automatically engage depending on the ambient light, allowing the camera to be effective in day/night environments.

1. Select the Day/Night from the radio button. The available options are Automatic, Schedule mode, Day mode and Night mode.
2. The default value is Automatic.

Light Sensor Sensitivity
Light sensor sensitivity has Low, Medium, and High three different levels. You may get current camera light illumination by clicking Refresh button to set proper level of Light sensor sensitivity. For example, when level sets at High less than 30lux, camera will switch Day & Night mode to Night mode.

IR Light
The built-in IR light illuminators will be activated automatically or manually so as to supplement the low light situation without additional equipment.

Save Settings Don't Save Settings

ICR

Removable IR-Cut filter trigger condition:

☒ Automatic Sensitivity: Medium: <20lux over 30 lux Refresh

☐ Day mode

☐ Night mode

☐ Schedule mode

Day mode(24hr)
From 07:00 To 18:00

IR LIGHT

IR Light Control: Medium

☐ Off

☐ On

☒ Sync. With ICR

☐ Schedule

IR Light Control On(24hr)
From 07:00 To 18:00

Save Settings Don't Save Settings

Helpful Hints...

ICR and IR:

Automatic: The day/night mode is set automatically. It is normally set in the Day mode and changes to the Night mode in a dark place.

Day mode: The Day mode means disable the IR Cut Filter.

Night mode: The Night mode means enable the IR Cut Filter.

Schedule mode: Set the Day/Night mode using the schedule. Fill in the time so the Day/Night mode is normally set to Day mode and it enters the Day mode at the start time and returns to the Night mode at the end time.

IR Light Control: In poor light conditions, open IR Light Control to automatically turn on the light to enable you to take clear picture. The IR Light Control has 4 options: Off, On, Sync. with ICR, and Schedule. Off: This option disable the IR Light Control. On: This option automatically opens the IR Light Control to enable a camera to take clear images in poor light conditions. Sync. with ICR: In this option, the IR Light Control will open automatically and follow the ICR setting. Schedule: In this option, you have to customize the setting to set the time period you want. Please set the Start time and the End time of your chosen schedule.

HTTPS

This page allows you to install and activate an HTTPS certificate for secure access to your camera.

Enable HTTPS Secure Connection: Check the box to enable the HTTPS (Hypertext Transfer Protocol Secure) service.

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

1. Create a self-signed certificate automatically
2. Create a self-signed certificate manually
3. Create a certificate request and install

Create certificate: Click **Create** to create the certificate.

Certificate Information: Displays the *Status* and other details about 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** and then click **Remove**.

Click **Save Settings**.

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LIVE VIDEO SETUP **ADVANCED** MAINTENANCE STATUS HELP

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HTTPS

To enable HTTPS, you have to create and install certificate first.

Save Settings Don't Save Settings

Helpful Hints..

Enable HTTPS secure connection allows you to enable HTTPS service.

Note:
1. The certificate can't be removed while the HTTPS is still enable. To remove the certificate you have to uncheck the "Enable HTTPS secure connection" first.

☒ Enable HTTPS secure connection

Create certificate method

☒ Create self-signed certificate automatically
☐ Create self-signed certificate manually
☐ Create certificate request and install

Create certificate: Create Private key existed

CERTIFICATE INFORMATION

Status	Active
Country	TW
State or province	Taiwan
Locality	Taipei
Organization	D-Link
Organization Unit	DHPD Dept.
Common Name	www.dlink.com

CSR Property Certificate Property Remove

Save Settings Don't Save Settings

Access List

Here you can set access permissions for users to view your DCS-5029L. A total of seven lists can be created for the Allow list and the Deny list.

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

Start IP address: Enter the starting **IP Address** for the devices (such as a computer) that have permission to access the video from the camera. Click **Add** to save the specified IP address.

End IP address: Enter the ending **IP Address** for the devices (such as a computer) that have permission to access the video from the camera. Click **Add** to save the specified IP address.

Delete allow list: Click to remove the customized setting from the Allow List.

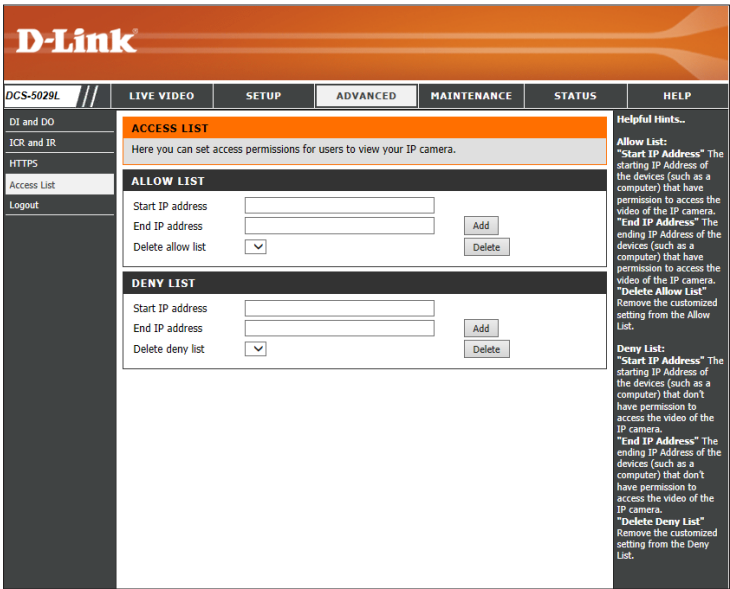
Deny List: The list of IP addresses that have no access to the camera.

Start IP address: Enter the starting **IP Address** for the devices that should have no access the video from the camera. Click **Add** to save the specified IP address.

End IP address: Enter the ending **IP Address** for the devices that should have no access the video from the camera. Click **Add** to save the specified IP address.

Delete deny list: Click to remove the customized setting from the Deny 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 IP addresses located between 171.0.0.0 and 192.255.255.255 can access your DCS-5029L.



Maintenance Admin

This section allows you to change the administrator's password and configure the settings for your camera. You can also create user account(s) for individuals allowed to access your camera. These users will only be able to access the Live Video page, and will not be able to change settings.

New Password: To change the admin password used to log into the Web interface, enter the **New Password** and enter it again in the next field to confirm. Click **Save**.

Add User Account: To create a new user account, enter a **User Name**, **New Password**, and enter the password again in the **Retype Password** field to confirm. Click **Add**. A maximum of eight user accounts can be created.

User List: Displays a *User Name* for each authorized user. The administrator can delete an account by clicking on the **Delete** button.

IP Camera Name: Enter a name for your camera.

Enable OSD: Check the box to enable the on-screen display (OSD) that you will see when viewing the video from your camera.

Label: Enter a **Label** that will be displayed when the OSD is enabled.

Show Time: Check the box to enable the time-stamp display on the screen, and click **Save** to save your settings.

Calibration Device: Click **Calibrate** to ensure that the camera's pan, tilt, zoom functions correctly. Should the camera's P/T/Z function incorrectly, or if the camera has been jarred, you may need to click the **Calibrate** button.

LED Control: When **On** is selected, the camera's status LED will function normally. Select **Off** to disable the status LED. Disabling the LED function may be useful if you want to make the camera less obvious.

Privacy Control: Check the box to enable privacy control. Click **Privacy On** to put the camera in **Privacy Mode**, and click **Save**. (When privacy mode is turned on, the camera lens is hidden.)

D-Link

DCS-5029L // LIVE VIDEO SETUP ADVANCED MAINTENANCE STATUS HELP

Admin System Firmware Upgrade Logout

ADMIN

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

ADMIN PASSWORD SETTING

New Password 32 characters maximum

Retype Password Save

ADD USER ACCOUNT

User Name 20 users maximum

New Password 32 characters maximum

Retype Password Add

USER LIST

User Name -- User List -- Delete

DEVICE SETTING

IP Camera Name DCS-5029L 63 characters maximum

☒ Enable OSD

Label DCS-5029L 30 characters maximum

Show Time ☒ Save

Calibration Device Calibrate

LED

LED ☒ On ☐ Off Save

PRIVACY CONTROL

☐ Privacy Control

☒ Privacy Off

☐ Privacy On Save

Helpful Hints..

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

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

LED: In the rear panel of your camera there is a LED beside the network adapter. ON: The LED will flash a light to indicate if the network is working or not. OFF: No light will show, forth option is turn off.

Privacy Control: Allow you to configure if camera could enter Privacy mode or not.

Privacy Off: Camera is in a normal operating mode.

Privacy On: Camera is in a Privacy mode. Live Video, Video Clip, Snapshot and SD Recording will be turned off.

SECURITY

System

This section allows you to save and restore your configuration, restore the factory settings, and/or restart the camera.

Save To Local Hard Drive: Click **Save Configuration** to save the current camera configuration to your local PC.

Load From Local Hard Drive: To load a previously saved configuration, click **Browse...** and select your saved configuration file. Then click **Load Configuration** to load the file from the local hard drive.

Restore To Factory Defaults: Click **Restore Factory Defaults** to reset all settings back to the factory defaults. Please note that this will erase any changes you have made to the settings of the camera.

Reboot The Device: Click **Reboot Device** to reboot the camera.

Enable Schedule Reboot: Check the box to enable a scheduled reboot, meaning the camera will reboot on a specific day or days, at a specific time. Then select a schedule by checking the boxes by the days of the week and selecting a time from the drop-down menu. Click **Save** to save your schedule.

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DCS-5029L // LIVE VIDEO SETUP ADVANCED MAINTENANCE STATUS HELP

Admin
System
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SYSTEM

Here you may backup, restore, and reboot your IP camera.

SYSTEM

Save To Local Hard Drive

Load From Local Hard Drive

Restore To Factory Defaults

REBOOT

Reboot Device

☐ Enable Schedule Reboot

☒ Sun ☒ Mon ☒ Tue ☒ Wed ☒ Thu ☒ Fri ☒ Sat

Time 00 : 00 [hh:mm]

Helpful Hints...

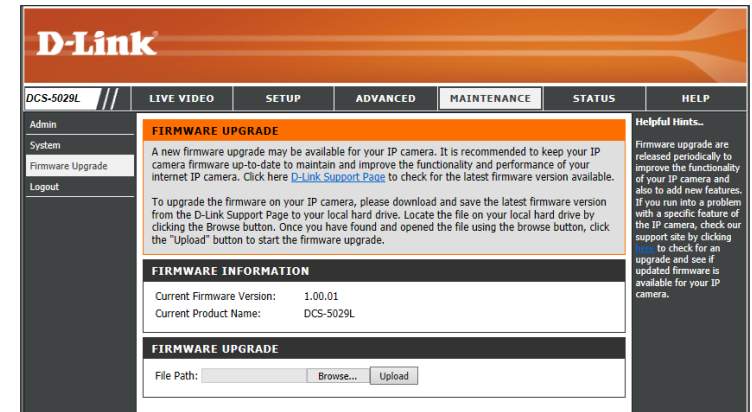
After the factory's default settings have been restored, use the installation wizard software provided with your IP camera to search and connect to the IP camera.

Firmware Upgrade

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

To upgrade the firmware on your DCS-5029L, go to **support.dlink.com** and download the latest firmware from the D-Link Support Page to your local hard drive. Click **Browse...** and select the firmware file, then click the **Upload** button to start the firmware upgrade.

Warning: The firmware upgrade process must not be interrupted or the camera may be damaged. When upgrading firmware, do not unplug the camera or your PC, or close your Web browser until the process is complete. It is also highly recommended that you use a wired connection for your camera and PC when upgrading firmware.



Status

Device Info

This section displays important information about your camera and network settings, including the *MAC Address* and *Firmware Version*.

D-Link

DCS-5029L

Device Info

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DEVICE INFO

All of your network connection details are displayed on this page. The firmware version is also displayed here.

INFORMATION

IP Camera Name	DCS-5029L
Time & Date	Sat Aug 9 01:27:50 2014
Firmware Version	1.00.01
MCU Version	20140106
MAC Address	B0:C5:54:00:3B:07
IP Address	192.168.0.111
IP Subnet Mask	255.255.255.0
Default Gateway	192.168.0.1
Primary DNS	192.168.0.1
Secondary DNS	0.0.0.0
PPPoE	Disable
DDNS	Disable
Agent Version	2.0.17-b36

Helpful Hints..

This page displays all the information about the IP camera and network settings.

Log

This section displays log information for your camera, which is the list of events that occurred most recently. You can download the log by clicking the **Download** button, or clear the log by clicking the **Clear** button.

The screenshot displays the D-Link DCS-5029L web interface. The top navigation bar includes the D-Link logo and tabs for LIVE VIDEO, SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The left sidebar contains links for Device Info, Log, and Logout. The main content area is titled 'SYSTEM LOG' and contains a description: 'The system log records IP camera events that have occurred.' Below this is a 'CURRENT LOG' section listing 20 events. At the bottom of the log list are buttons for 'First Page', 'Previous 20', 'Next 20', 'Clear', and 'Download'. A 'Helpful Hints...' section on the right provides instructions on how to save and clear the log.

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DCS-5029L // LIVE VIDEO SETUP ADVANCED MAINTENANCE STATUS HELP

Device Info
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SYSTEM LOG
The system log records IP camera events that have occurred.

CURRENT LOG

1. 2014-08-09 01:02:50 admin LOGIN OK FROM 192.168.0.196
2. 2014-08-09 01:01:17 DCS-5029L ACQUIRE DHCP IP 192.168.0.111
3. 2014-08-09 01:01:00 NETWORK RECONNECT
4. 2014-08-09 01:00:57 NETWORK LOSS
5. 2014-08-09 01:00:46 NETWORK RECONNECT
6. 2014-08-09 01:00:33 NETWORK LOSS
7. 2014-08-09 00:58:16 admin LOGIN OK FROM 192.168.0.112
8. 2014-08-09 00:57:52 DCS-5029L ACQUIRE DHCP IP 192.168.0.108
9. 2014-08-09 00:57:48 NETWORK RECONNECT
10. 2014-08-09 00:57:46 SD CARD SIZE 995912 KB
11. 2014-08-09 00:57:46 NETWORK LOSS
12. 2014-08-09 00:57:46 NETWORK INTERFACE CHANGE TO WLAN
13. 2014-08-09 00:57:46 SYSTEM SET IR LIGHT OFF
14. 2014-08-09 00:57:45 SYSTEM BOOTING
15. 2014-08-09 00:57:44 MCU Initialized Successfully
16. 2014-08-09 00:52:43 DCS-5029L ACQUIRE DHCP IP 192.168.0.108
17. 2014-08-09 00:52:35 NETWORK RECONNECT
18. 2014-08-09 00:52:34 NETWORK LOSS
19. 2014-08-09 00:52:17 admin LOGIN OK FROM 192.168.0.112
20. 2014-08-09 00:47:06 DCS-5029L ACQUIRE DHCP IP 192.168.0.108

First Page Previous 20 Next 20
Clear Download

Helpful Hints..
You can save the log to your local hard IP camera by clicking the Download button, and you can clear the log by clicking on the Clear button.

Help

Click on the link to the help topic for more information.

DCS-5029L

//

Help

Logout

LIVE VIDEO

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HELP

- LIVE VIDEO
- SETUP
- MAINTENANCE
- ADVANCED
- STATUS

LIVE VIDEO

- Camera

SETUP

- Setup Wizard
- Network Setup
- Wireless Setup
- Dynamic DNS
- Image Setup
- Audio and Video
- PTZ Setup
- Motion Detection
- Sound Detection
- Time and Date
- Event Setup
- SD Card

ADVANCED

- DI and DO
- ICR and IR
- HTTPS
- Access List

MAINTENANCE

- Admin
- System
- Firmware Upgrade

STATUS

- Device Info
- Log

SECURITY

Configuring the DCS-5029L without mydlink

The DCS-5029L is a versatile network camera offering both video and audio monitoring. It serves as a powerful surveillance system. The DCS-5029L can be used with any wired or 802.11g/n wireless router. This section explains how to view the camera from either the Internet or from inside your internal network.

For the basic setup of the DCS-5029L, follow the steps outlined in the Quick Install Guide. After you have completed the setup of the DCS-5029L as instructed in the Quick Install Guide, you will have an operating camera with an assigned IP address. Because you are using a router to share the Internet with one or more PCs, the IP address assigned to the network camera will be a local IP address. This allows viewing within your Local Area Network (LAN) until the router is configured to allow remote viewing of the camera over the Internet.

Components Needed:

- 1 DCS-5029L HD Pan & Tilt Day/Night Network Camera
- 1 Ethernet Cable
- A Wired or Wireless Router Like the D-Link DIR-655 Wireless Router
- Ethernet-based PC for System Configuration

Setting up the DCS-5029L for Use Behind a Router

Installing a DCS-5029L on your network is an easy four-step procedure:

1. Assign a local IP address to your network camera.
2. View the network camera using your Internet Explorer Web browser.
3. Access the router with your Web browser.
4. Open virtual server ports to enable remote image viewing.

Note: *These are the steps for manual installation. However, if you decide to use the Setup Wizard, it will perform all steps automatically.*

This section is designed to walk you through the setup process for installing your camera behind a router and enable remote video viewing.

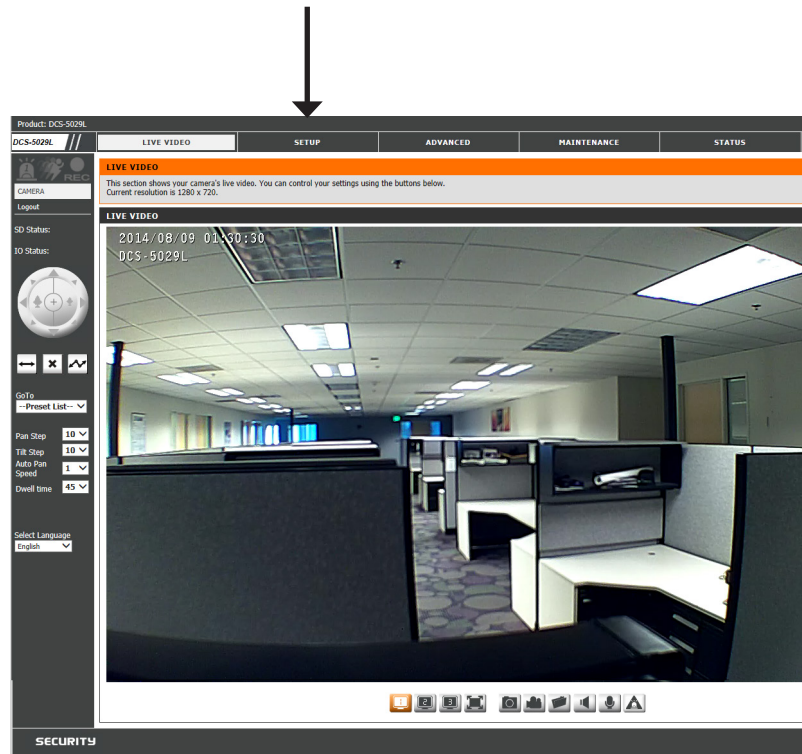
1. Assign a Local IP Address to Your Camera

After you complete initial setup (refer to “Zero Configuration Setup” on page 16 or “Camera Setup Wizard” on page 20), your camera will be assigned a local IP address that allows it to be recognized by the router. Write down this IP address for future reference.

2. View the Network Camera Using Your Internet Explorer Web Browser

Open a Web browser. In the address bar, type in the IP address that was assigned to the camera by the Setup Wizard. The DCS-5029L *Live Video* page appears with a window displaying live video from the camera. You are able to view this screen from any PC running Internet Explorer on your LAN.

Click on **Setup** at the top of the Live Video screen. Click on **Network Setup** so you can learn about port settings. (Instructions on the next page.)



The **Setup > Network** page displays the port settings for your camera. If necessary, these ports can be changed if they are already in use by other devices (e.g. in a multiple camera environment).

Note: Both the HTTP port and RTSP port are required to be opened for the DCS-5029L.

D-Link

DCS-5029L // LIVE VIDEO **SETUP** ADVANCED MAINTENANCE STATUS HELP

Setup Wizard
Network Setup
Wireless Setup
Dynamic DNS
Image Setup
Audio and Video
PTZ Setup
Motion Detection
Sound Detection
Time and Date
Event Setup
SD Card
Logout

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

LAN SETTINGS
☒ DHCP
☐ Static IP Client
 IP address: 192.168.0.111
 Subnet mask: 255.255.255.0
 Default router: 192.168.0.1
 Primary DNS: 192.168.0.1
 Secondary DNS: 0.0.0.0
☒ Enable UPnP presentation
☐ Enable UPnP port forwarding
 Forwarding Port: 1024 [Test]
 Forwarding Status: UPnP forwarding is inactive

PPPoE SETTINGS
☐ Enable ☒ Disable
 User Name:
 Password:
 Confirm password:
 PPPoE Status: PPPoE is inactive.

HTTP
 HTTP port: 80
 Access name for stream1: video1.mjpg
 Access name for stream2: video2.mjpg
 Access name for stream3: video3.mjpg

HTTPS
 HTTPS port: 443

RTSP
 Authentication: Digest
 RTSP port: 554
 Access name for stream1: live1.sdp
 Access name for stream2: live2.sdp
 Access name for stream3: live3.sdp


Helpful Hints...
 Select DHCP Connection If you are running a DHCP server on your network and would like an IP address assigned to your IP camera automatically.
 UPnP: Enabling UPnP settings will allow you to configure your IP camera as an UPnP device in the network.
 PPPoE Setting: If you use the IP camera to connect directly to the Internet, you will need to enter the username and password, which were given to you when you set up your account with your Internet Service Provider. If the camera is behind a router or a gateway, you do not need to configure this setting.
 HTTP: HTTP Port is the port you allocate in order to connect to the IP camera via a standard web browser.
 HTTPS: HTTPS Port in a IP camera connects it with a PC via a secure web browser.
 RTSP: RTSP Port is the port you allocate in order to connect to a IP camera by using streaming mobile device (s), such as a mobile phone or PDA.
 CoS (Class of Service): Coarsely-grained traffic control based on the L2 protocol. Class of Service technologies do not guarantee a level of service in terms of bandwidth and delivery time, they offer a "best-effort".
 QoS (Quality of Service): Finely-grained traffic control, a resource reservation control mechanism. Quality of service guarantees are important if the network capacity is insufficient, especially for real-time streaming multimedia.

Router Set-Up and Installation

The following steps generally apply to any router that you have on your network. The D-Link DIR-655 is used as an example to clarify the configuration process. Refer to the router’s user manual for more information on router operation and configuration.

3. Access the Router with Your Web Browser

If you have cable or DSL Internet service, you will most likely have a dynamically assigned WAN IP address. Dynamic means that your router’s WAN IP address can change from time to time depending on your ISP. A dynamic WAN IP address identifies your router on the public network and allows it to access the Internet. To find out your router’s WAN IP address, go to the *Status* page on your router and locate the WAN information. The WAN IP address will be listed. This is the address that you will need to type into your Web browser to view your camera over the Internet.

Your WAN IP address will be listed on the router’s **Status > Device Info** page. 

Note: Because a dynamic WAN IP can change from time to time depending on your ISP, you may want to obtain a Static IP address from your ISP. A Static IP address is a fixed IP address that will not change over time and will be more convenient for you to use to access your camera from a remote location. The Static IP address will also allow you to access your camera attached to your router over the Internet.

DIR-655

SETUP

ADVANCED

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STATISTICS

INTERNET SESSIONS

WIRELESS

WISH SESSIONS

DEVICE INFORMATION

All of your Internet and network connection details are displayed on this page. The firmware version is also displayed here.

GENERAL

Time : 2007/10/10 PM 10:10:33
Firmware Version : 1.02, 2006/10/13

WAN

Connection Type : DHCP Client
QoS Engine : Active
Cable Status : connected
Network Status : connected
Connection Up Time : N/A

RenewRelease

MAC Address : 00:19:5B:03:04:E9
IP Address : 210.21.33.48
Subnet Mask : 255.255.255.248
Default Gateway : 210.21.33.254
Primary DNS Server : 168.95.1.1
Secondary DNS Server : 0.0.0.0

LAN

MAC Address : 00:19:5B:03:04:E8
IP Address : 192.168.0.1
Subnet Mask : 255.255.255.0
DHCP Server : Enabled

WIRELESS LAN

Wireless Radio : Enabled
WISH : Active
MAC Address : 00:19:5B:03:04:E8
Network Name (SSID) : dlink
Channel : 4
Security Mode : Disabled
Wi-Fi Protected Setup : Enabled/Not Configured

LAN COMPUTERS

IP Address	Name (if any)	MAC
192.168.0.155	end_user	00:05:5d:ce:b3:8d

IGMP MULTICAST MEMBERSHIPS

Multicast Group Address

239.255.255.250

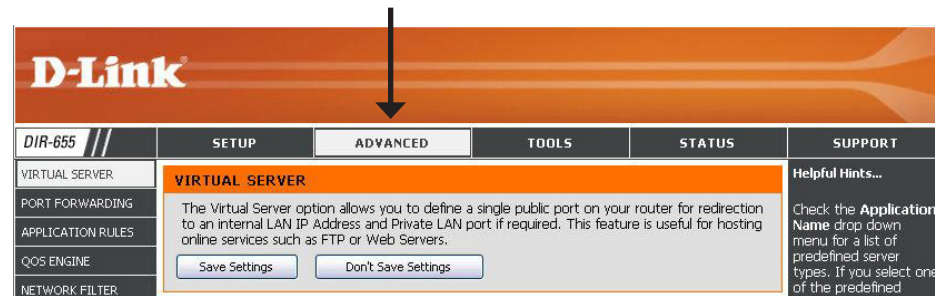
Helpful Hints...

All of your WAN and LAN connection details are displayed here.

More...

4. Open Ports to Enable Remote Image Viewing (Port Forwarding)

The firewall security features built into the DIR-655 router prevent users from accessing the video from the DCS-5029L over the Internet. The router connects to the Internet over a series of numbered ports. The ports normally used by the DCS-5029L are blocked from access over the Internet. Therefore, these ports need to be made accessible over the Internet. This is accomplished using the Virtual Server function on the DIR-655 router. The Virtual Server ports used by the camera must be opened through the router for remote access to your camera. Virtual Server is accessed by clicking on the **Advanced** tab of the router screen.



Follow these steps to configure your router's Virtual Server settings:

1. Click **Enabled**.
2. Enter a different name for each entry.
3. Enter your camera's local IP address (e.g., **192.168.0.120**) in the *Private IP* field.
4. Select **TCP** for HTTP port, both (**TCP and UDP**) for RTSP and both (**TCP and UDP**) for 5556 - 5559 ports.
5. If you are using the default camera port settings, enter **80** into the Public and Private Port section, click **Apply**.
6. Scheduling should be set to **Always** so that the camera images can be accessed at any time.

Note: *Instructions for Virtual Server continue on the next page.*

Repeat the previous steps adding the port 554 to both the Public and Private Port sections. A check mark appearing before the entry name will indicate that the ports are enabled.

Note: Some ISPs may block access to port 80 and other commonly used Internet ports to conserve bandwidth. Check with your ISP so that you can open the appropriate ports accordingly. If your ISP does not pass traffic on port 80, you will need to change the port the camera uses from 80 to something else, such as 800. Not all routers are the same, so refer to your user manual for specific instructions on how to open ports.

Enter valid ports in the Virtual Server section of your router. Please make sure to check the box next to the camera name on the Virtual Server List to enable your settings.

Product Page: DIR-655

Hardware Version: A1 Firmware Version: 1.02

DIR-655

VIRTUAL SERVER

PORT FORWARDING

APPLICATION RULES

QOS ENGINE

NETWORK FILTER

ACCESS CONTROL

WEBSITE FILTER

INBOUND FILTER

FIREWALL SETTINGS

ADVANCED WIRELESS

WISH

WI-FI PROTECTED SETUP

ADVANCED NETWORK

SETUP

ADVANCED

TOOLS

STATUS

SUPPORT

VIRTUAL SERVER

The Virtual Server option allows you to define a single public port on your router for redirection to an internal LAN IP Address and Private LAN port if required. This feature is useful for hosting online services such as FTP or Web Servers.

Save Settings

Don't Save Settings

Helpful Hints...

Check the **Application Name** drop down menu for a list of predefined server types. If you select one of the predefined server types, click the arrow button next to the drop down menu to fill out the corresponding field.

You can select a computer from the list of DHCP clients in the **Computer Name** drop down menu, or you can manually enter the IP address of the computer at which you would like to open the specified port.

Select a schedule for when the virtual server will be enabled. If you do not see the schedule you need in

24--VIRTUAL SERVERS LIST

	Name	Port	Traffic Type	Schedule
<input checked="" type="checkbox"/>	DCS-942L	Public 80	Protocol TCP	Schedule Always
	IP Address 192.168.0.120	Private 80	6	Inbound Filter Allow All
<input checked="" type="checkbox"/>	DCS-942L	Public 554	Protocol TCP	Schedule Always
	IP Address 192.168.0.120	Private 554	6	Inbound Filter Allow All
<input type="checkbox"/>		Public 0	Protocol TCP	Schedule Always
	IP Address 0.0.0.0	Private 0	6	Inbound Filter Allow All

Troubleshooting

1. What is Remote Access? How do I enable it?

Remote Access allows you to access your camera from the **www.mydlink.com** website. You can view live video from your camera and manage your camera's settings when you're away from home. Simply use the Camera Setup Wizard to register your camera with your mydlink account. (Refer to ["Camera Setup Wizard" on page 20.](#))

After running the Camera Setup Wizard, you should see *Remote Status: Enabled* on the summary page.

If you see *Remote Status: Disabled*, make sure that:

- the front LED on your camera is lit solid green
- your Internet connection is working
- your router's LAN & WAN connections are working properly
- your router has UPnP enabled (refer to your router's user manual)
- your router can get a public IP address
- your router's firmware has been upgraded to the latest version
- you have tried rebooting your router by unplugging it, then plugging it back in

After checking the above items, you can click the **Retry** button to refresh the summary screen to see if Remote Access has been enabled.

2. What can I do if I forget the password for my camera's Web configuration interface?

If you forget your password, you will need to perform a factory reset of your camera. Unfortunately, this will change all your settings back to the factory default settings.

To reset your camera, use an unfolded paper clip to press and hold the **RESET** button on the back of your camera for about 10 seconds while your camera is plugged in.



3. The image in the Live View is blurry or out of focus, what can I do?

You can manually adjust the focus. While watching the live view, rotate the focus adjustment ring (the ring surrounding the lens of the camera) until the desired level of focus is achieved.

4. Why don't the LEDs light up?

The power supply might be faulty. Confirm that you are using the provided DC 5V power supply for this camera. Verify that the power supply is correctly connected. The WPS LED will only turn on if there is a WPS connection present, the camera may still be functioning correctly even if this LED is not lit. If the camera is functioning normally, the LEDs may have been disabled. See ["Admin" on page 63](#) for information about how to enable the LEDs.

5. Why is the camera's network connection unreliable?

If you are using a wired connection to connect the camera, there might be a problem with the network cable. To confirm that the cables are working, PING the address of a known device on the network. If the cabling is OK and your network is reachable, you should receive a reply similar to the following (...bytes = 32 time = 2 ms).

Another possibility may be that a network device such as a hub or switch utilized by the camera is not functioning properly. Please confirm the power for the devices are well connected and functioning properly.

If you are using a wireless connection to connect the camera, be aware of the range limitations of the wireless N standard. Most wireless N devices have a maximum indoor range of around 230 feet (70 meters). Also be aware that obstacles such as walls, floors, doors and other solid objects can have an adverse effect on signal range.

6. Why does a series of broad vertical white lines appear throughout the image?

It could be that the image sensor has become overloaded when it has been exposed to bright light, such as direct exposure to sunlight or halogen lights. Move the camera into a more shaded area immediately, as prolonged exposure to bright lights will damage the sensor.

7. The camera is producing noisy images. How can I solve the problem?

The video images might be noisy if the camera is used in a very low-light environment. Try switching to night mode if you are consistently monitoring a low light area.

8. 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 to at least 16-bit color. Using 16 or 256 colors on your computer will produce dithering artifacts in the image, making the image look as if it is of poor quality.

You may also need to check your image settings to make sure the brightness, contrast, and other settings are set properly. For more, refer to "[Image Setup](#)" on page 41.

9. Why are no images available through the Web browser?

ActiveX might be disabled. If you are viewing the images from Internet Explorer make sure ActiveX has been enabled in the *Internet Options* menu. You may also need to change the security settings on your browser to allow the ActiveX plug-in to be installed. Also, check that you have the latest version of Java installed. Java can be downloaded from <http://www.java.com>

If you are using Internet Explorer with a version number 6 or lower, then you will need to upgrade your Web browser software in order to view the streaming video transmitted by the camera.

10. The PIR sensor (passive infrared sensor) is not operating well, how can I improve the quality?

- For the PIR sensor to function properly, it must have a direct line of sight to the object in motion. When the room is filled with obstacles or the line of sight is obstructed by glass, the PIR will not function properly.
- Do not install the camera in direct sunlight or under extremely bright lights. As the temperature of the environment rises, the PIR detection may work slower, making the PIR sensor slow to detect movement. (For quicker response time, select an environment with an average temperature of 77°F (25°C) or lower.)
- This camera should only be installed indoors. Do not install this camera where IR interference can be a problem, like pointing through a glass door or window. Placing the camera in the path of car headlights or in direct sunlight can also cause interference.
- Do not install this camera next to or in front of an air conditioner outlet or vent.
- Do not install this camera close to wireless devices with high frequencies, as the PIR sensor is affected by RF radiation.
- Any movement from someone or something with a normal body temperature, like a human or an animal, will be detected by the PIR sensor. Smaller movements can be detected within a distance of 8 feet (about 2.5 meters), at the height of an average adult.* However, for motion detection between a distance of 8 and 16 feet (2.5 and 5 meters), larger movements are required.
- For best results, install this camera on a firm, stationary, anti-shock surface.

***Note:** The PIR sensor will operate most effectively when installed at the proper height. (Keep in mind that the average height of an adult in the United States currently ranges from about 5' 4" for women to 5' 10" for men.)

Technical Specifications

SYSTEM REQUIREMENTS

- Microsoft Windows® 8, 7, Vista®, or Mac OS® X (10.6 or higher)
- PC with 1.3 GHz or above and at least 128 MB RAM
- Internet Explorer 8 or higher, Firefox, Chrome, Safari 5 or higher, with the latest version of Java installed and enabled

NETWORKING PROTOCOL

- IPV4, ARP, TCP, UDP, ICMP
- DHCP Client
- NTP Client (D-Link)
- DNS Client
- DDNS Client (D-Link)
- SMTP Client
- FTP Client
- HTTP Server
- Samba Client
- PPPoE
- UPnP
- UPnP Port Forwarding
- RTP
- RTSP
- RTCP
- IP Filtering
- QoS/CoS
- Multicast

BUILT-IN PROTOCOL

- 10/100 M BaseT Ethernet
- 802.11 g/n WLAN

WIRELESS SECURITY

- WPA-PSK
- WPA2-PSK

VIDEO CODECS

- H.264
- JPEG for Still Images

VIDEO FEATURES

- Adjustable Image Size, Quality, Frame Rate, and Bit Rate
- Time Stamp and Text Overlays
- Configurable Motion Detection
- Flip and Mirror
- Pre-event Snapshot
- Pre-event Recording

16:9 RESOLUTION

- 1280 x 720 at up to 30 fps
- 800 x 448 at up to 30 fps
- 640 x 360 at up to 30 fps
- 480 x 272 at up to 30 fps
- 320 x 176 at up to 30 fps

4:3 RESOLUTION

- 960 x 720 at up to 30 fps
- 800 x 592 at up to 30 fps
- 640 x 480 at up to 30 fps
- 480x 352 at up to 30 fps
- 320 x 240 at up to 30 fps

LENS

- Focal Length: 2.4 mm
- Aperture: F2.0

SENSOR

- 1/4" Progressive CMOS Sensor

IR LED

- 26 feet illumination distance with 4 IR LEDs

MINIMUM ILLUMINATION

- 0 lux with IR LEDs on

VIEWING ANGLE

- Horizontal: 98°
- Vertical: 52°
- Diagonal: 115°

PAN/TILT RANGE

- Pan Range: +170° to -170° (total 340°)
- Tilt Range: +95° to -10° (total 105°)

DIGITAL ZOOM

- Up to 10x

POWER

- Input: 100-240 VAC, 50/60Hz
- Output: 5VDC, 2.5 A

DIMENSIONS (W X D X H)

- 4.72 x 4.06 x 5.11 in (119.89 x 103.12 x 129.79 mm)

WEIGHT

- Device: 0.75 lbs (340.2 grams)

MAX POWER CONSUMPTION

- 8.64 W

OPERATING TEMPERATURE

- 32 °F to 104 °F (0 °C to 40 °C)

STORAGE TEMPERATURE

- -4 °F to 158 °F (-20 °C to 70 °C)

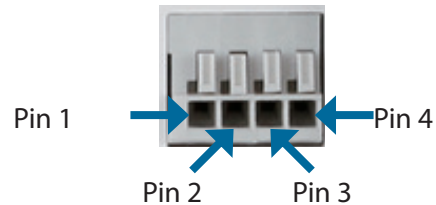
HUMIDITY

- 20-80% RH Non-condensing

EMISSION (EMI), SAFETY & OTHER CERTIFICATIONS

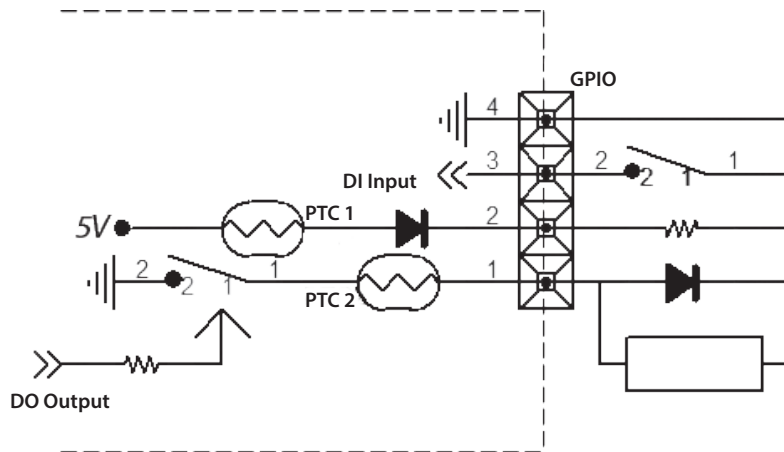
- FCC Class B
- ICES
- CE-LVD
- CE

DI/DO Specifications

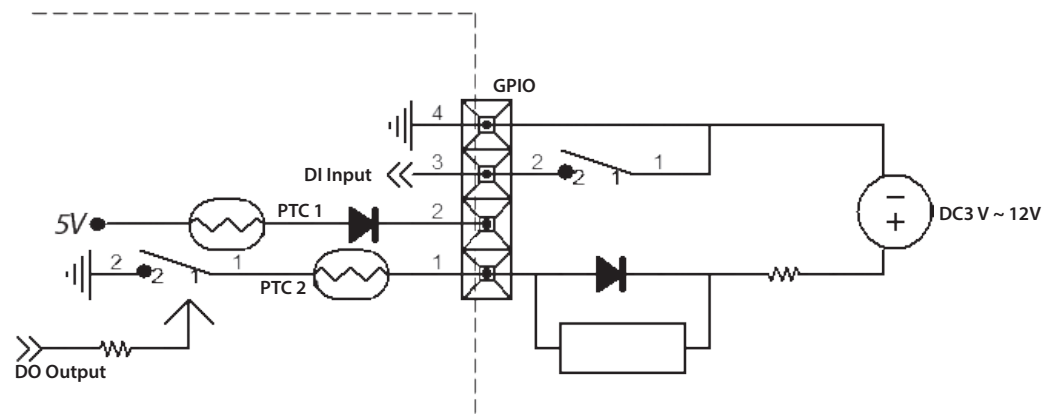


PIN	FUNCTION	NOTE
1	Digital Out (DO)	Uses an open-drain NFET transistor with the source connected to GND in camera. If used with an external relay, a diode must be connected in parallel with the load for protection against voltage transients. Max loading is 100 mA.
2	DC5V OUTPUT	DC 5 V Output / Max. 100 mA
3	Digital In (DI)	A switch from DI to GND, activated by setting NO. or NC.
4	GND	GND

Internal 5V Power



External 3~12V Power



Contacting Technical Support

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

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

- Model number of the product (e.g., DCS-5029L)
- Hardware Revision (located on the label on the bottom of the network camera (e.g., rev A1))
- Serial Number (s/n number located on the label on the bottom of the network camera).

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

For customers within the United States:

Phone Support:

(877) 453-5465

Internet Support:

<http://support.dlink.com>

For customers within Canada:

Phone Support:

(866) 354-6599

Internet Support:

<http://support.dlink.ca>

Networking Basics

Check Your IP Address

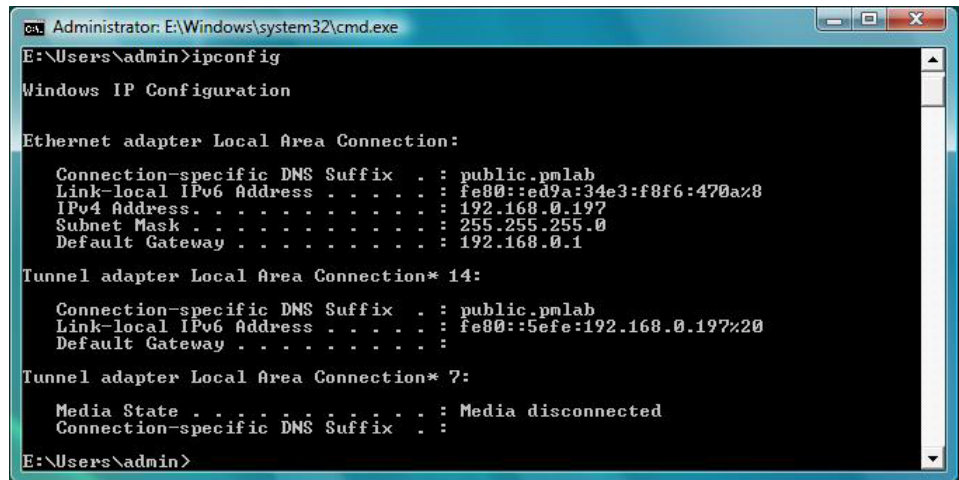
After you install your new D-Link wireless adapter and have established a wireless connection, by default, the TCP/IP settings should be set to obtain an IP address from a DHCP server (i.e., router) automatically. To verify your IP address, please follow the steps below.

Windows® 8 Users

- Press the **Windows key** and **R** together. Type **cmd** in the box and click **OK**.
- At the prompt, type **ipconfig** and press **Enter**.
- This will display the IP address, subnet mask, and default gateway of your adapter.

Windows® 7/Vista® Users

- Click **Start**, type **cmd** in the search box and then click **OK**.
- At the prompt, type **ipconfig** and press **Enter**.
- This will display the IP address, subnet mask, and default gateway of your adapter.



```
Administrator: E:\Windows\system32\cmd.exe
E:\Users\admin>ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . : public.pmlab
    Link-local IPv6 Address . . . . . : fe80::ed9a:34e3:f8f6:470a%8
    IPv4 Address. . . . . : 192.168.0.197
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.0.1

Tunnel adapter Local Area Connection* 14:

    Connection-specific DNS Suffix  . : public.pmlab
    Link-local IPv6 Address . . . . . : fe80::5efe:192.168.0.197%20
    Default Gateway . . . . . :

Tunnel adapter Local Area Connection* 7:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . :

E:\Users\admin>
```

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.

Statically Assign an IP Address

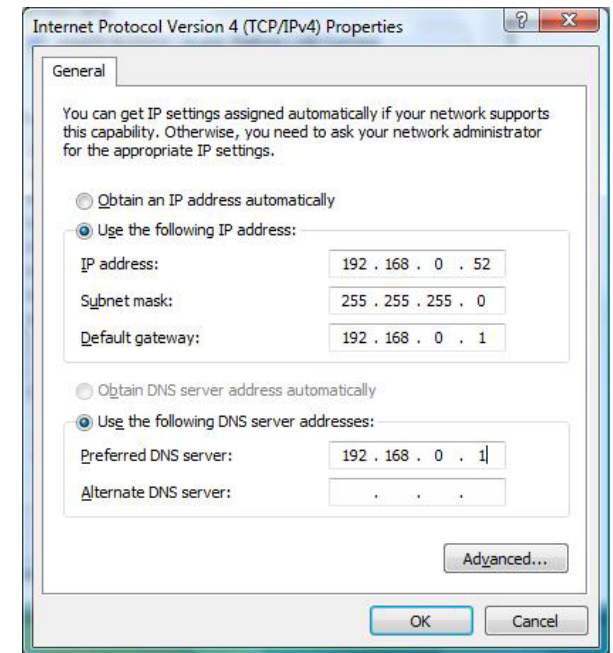
If you are not using a DHCP capable gateway/router, or you need to assign a static IP address, please follow the steps below:

Windows® 8 Users

- Press the **Windows** key and then type **IP**. Click **Settings** on the right side and then click **View Network Connections**.
- Right-click on the adapter which represents your D-Link wireless network adapter.
- Highlight **Internet Protocol Version 4 (TCP /IPv4)** and click **Properties**.
- Click **Use the following IP address** and enter an IP address that is on the same subnet as your network or LAN IP address on your router or network.

Example: If the router'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 or gateway.
- Set **Primary DNS** the same as the LAN IP address of your router or gateway.
- The **Secondary DNS** is optional (you may enter a DNS server from your ISP).
- Click **OK** to save your settings.

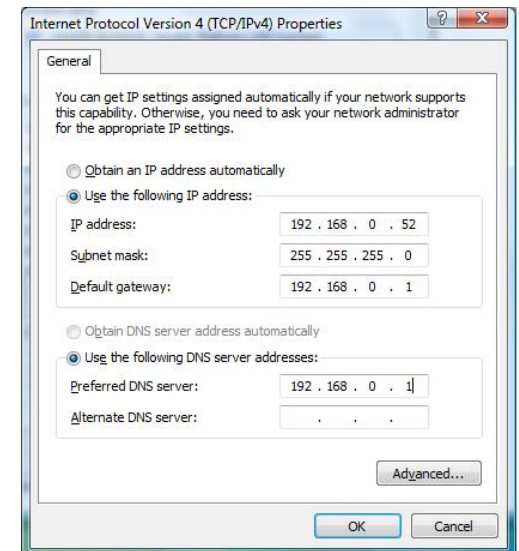


Windows® 7/ Vista® Users

- Click on **Start > Control Panel** (make sure you are in Classic View). Double-click on the **Network and Sharing Center** icon. If you are using Windows Vista, click on **Manage network connections** along the left panel in the window. For Windows® 7, click on **Change adapter settings**.
- Right-click on the **Local Area Connection** which represents your D-Link wireless network adapter which will be connected to your network.
- Highlight **Internet Protocol Version 4 (TCP /IPv4)** and click **Properties**.
- Click **Use the following IP address** and enter an IP address that is on the same subnet as your network or LAN IP address on your router or network.

Example: If the router'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 or gateway.
- Set **Primary DNS** the same as the LAN IP address of your router or gateway.
- The **Secondary DNS** is optional (you may enter a DNS server from your ISP).
- Click **OK** to save your settings.



Warranty

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

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

Limited Warranty:

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

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

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

Limited Software Warranty:

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

Non-Applicability of Warranty:

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

Submitting A Claim (USA):

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

- The customer must submit with the product as part of the claim a written description of the Hardware defect or Software nonconformance in sufficient detail to allow D-Link to confirm the same, along with proof of purchase of the product (such as a copy of the dated purchase invoice for the product) if the product is not registered.
- The customer must obtain a Case ID Number from D-Link Technical Support at <https://support.dlink.com>, who will attempt to assist the customer in resolving any suspected defects with the product. If the product is considered defective, the customer must obtain a Return Material Authorization ("RMA") number by completing the RMA form and entering the assigned Case ID Number at <http://rma.dlink.com/>.

- After an RMA number is issued, the defective product must be packaged securely in the original or other suitable shipping package to ensure that it will not be damaged in transit, and the RMA number must be prominently marked on the outside of the package. Please refer to shipping and packaging instructions located online at <http://rma.dlink.com/>.
- The customer is responsible for all in-bound shipping charges to D-Link. No Cash on Delivery ("COD") is allowed. Products sent COD will either be rejected by D-Link or become the property of D-Link. Products shall be fully insured by the customer and shipped to **D-Link Systems, Inc., 17595 Mt. Herrmann, Fountain Valley, CA 92708**. D-Link will not be held responsible for any packages that are lost in transit to D-Link. The repaired or replaced packages will be shipped to the customer via UPS Ground or any common carrier selected by D-Link. Return shipping charges shall be prepaid by D-Link if you use an address in the United States, otherwise we will ship the product to you freight collect. Expedited shipping is available upon request and provided shipping charges are prepaid by the customer. D-Link may reject or return any product that is not packaged and shipped in strict compliance with the foregoing requirements, or for which an RMA number is not visible from the outside of the package. The product owner agrees to pay D-Link's reasonable handling and return shipping charges for any product that is not packaged and shipped in accordance with the foregoing requirements, or that is determined by D-Link not to be defective or non-conforming.

Submitting A Claim (Canada):

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

- Customers need to provide their receipt (proof of purchase) even if the product is registered. Without a receipt, no warranty service will be done. The registration is not considered a proof of purchase.
- The customer must submit with the product as part of the claim a written description of the Hardware defect or Software nonconformance in sufficient detail to allow D-Link to confirm the same, along with proof of purchase of the product (such as a copy of the dated purchase invoice for the product) if the product is not registered.
- The customer must obtain a Case ID Number from D-Link Technical Support at 1-800-361-5265, who will attempt to assist the customer in resolving any suspected defects with the product. If the product is considered defective, the customer must obtain a Return Material Authorization ("RMA") number by completing the RMA form and entering the assigned Case ID Number at <https://rma.dlink.ca/>.
- After an RMA number is issued, the defective product must be packaged securely in the original or other suitable shipping package to ensure that it will not be damaged in transit, and the RMA number must be prominently marked on the outside of the package. Do not include any manuals or accessories in the shipping package. D-Link will only replace the defective portion of the product and will not ship back any accessories.

- The customer is responsible for all in-bound shipping charges to D-Link. No Cash on Delivery (“COD”) is allowed. Products sent COD will be rejected by D-Link. Products shall be fully insured by the customer and shipped to D-Link Networks, Inc., 2525 Meadowvale Boulevard Mississauga, Ontario, L5N 5S2 Canada. D-Link will not be held responsible for any packages that are lost in transit to D-Link. The repaired or replaced packages will be shipped to the customer via Purolator Canada or any common carrier selected by D-Link. Return shipping charges shall be prepaid by D-Link if you use an address in Canada, otherwise we will ship the product to you freight collect. Expedited shipping is available upon request and provided shipping charges are prepaid by the customer. D-Link may reject or return any product that is not packaged and shipped in strict compliance with the foregoing requirements, or for which an RMA number is not visible from the outside of the package. The product owner agrees to pay D-Link’s reasonable handling and return shipping charges for any product that is not packaged and shipped in accordance with the foregoing requirements, or that is determined by D-Link not to be defective or non-conforming.
- RMA phone number: 1-800-361-5265 Hours of Operation: Monday-Friday, 9:00AM – 9:00PM EST

What Is Not Covered:

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

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

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

Disclaimer of Other Warranties:

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

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

Limitation of Liability:

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CE Mark Warning:

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

FCC Statement:

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

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

FCC Caution:

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

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

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

IMPORTANT NOTICE:

FCC Radiation Exposure Statement:

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

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

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

Industry Canada Statement:

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

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

IMPORTANT NOTE:

Radiation Exposure Statement:

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

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

Registration

Register your product online at registration.dlink.com



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

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