



**DCS-5211L HD Power over Ethernet Pan/Tile Network Camera**



**DCS-5222L HD Wireless N Pan/Tile Network Camera**

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# Manual Overview

This manual contains the following sections:

- Section 1** - “Product Overview” describes what is included with the DCS-5222L/DCS-5211L camera, and things to consider before installing.
- Section 2** - “mydlink Portal” provides detailed information on usage and configuration of your product with [www.mydlink.com](http://www.mydlink.com).
- Section 3** - “Installation” describes how to install the camera on your network .
- Section 4** - “Configuration” describes how to configure the settings on your DCS-5222L/DCS-5211L camera.
- Section 5** - “Troubleshooting” explains how to resolve common issues.
- Section 6** - “Appendix” contains special procedures and technical specifications.

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## Manual Revisions

Revision	Date	Description
1.0	November 28, 2011	• DCS-5222L/DCS-5211L Version 1 with firmware version 1.00_0922

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# Federal Communication Commission Interference Statement

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.

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 communications. 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 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 transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

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## **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.

### **FOR COUNTRY CODE SELECTION USAGE (WLAN DEVICES)**

**Note:** The country code selection is for non-US model only and is not available to all US model. Per FCC regulation, all WiFi product marketed in US must fixed to US operation channels only.

## **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.

Ce dispositif est conforme à la norme CNR-210 d'Industrie Canada applicable aux appareils radio exempts de licence. Son fonctionnement est sujet aux deux conditions suivantes: (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

## **Radiation Exposure Statement:**

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

## **Déclaration d'exposition aux radiations:**

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

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This device has been designed to operate with an antenna having a maximum gain of [2.34] dBi. Antenna having a higher gain is strictly prohibited per regulations of Industry Canada. The required antenna impedance is 50 ohms. Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

This radio transmitter (IC: 4216A-DCS5222L / Model: DCS-5222L) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Ce dispositif a été conçu pour fonctionner avec une antenne ayant un gain maximal de dBi [2.34]. Une antenne à gain plus élevé est strictement interdite par les règlements d'Industrie Canada. L'impédance d'antenne requise est de 50 ohms. Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada.

Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

Le présent émetteur radio (IC: 4216A-DCS5222L / Model: DCS-5222L) a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal et l'impédance requise pour chaque type d'antenne. Les types d'antenne non inclus dans cette liste, ou dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

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經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

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# Product Overview

Thank you for purchasing the DCS-5222L/DCS-5211L Network Camera. The DCS-5222L/DCS-5211L is a versatile solution for your small office or home. The DCS-5222L/DCS-5211L is a complete system with a built-in CPU and web server that transmits high quality video images for security and surveillance. DCS-5222L/DCS-5211L can be accessed remotely, and controlled from any PC/Notebook over your local network or across the Internet via a web browser. The DCS-5222L/DCS-5211L is simple to install and intuitive web-based interface offer easy integration with your Ethernet/Fast Ethernet or 802.11g/n wireless network (Only the DCS-5222L offers wireless connectivity) . The DCS-5222L/DCS-5211L comes with remote monitoring and motion detection features for a complete and cost-effective home security solution.

- Remotely monitor your home or office over the Internet
- Web-based Recording to a PC's local hard drive – no software required
- Mydlink-enabled technology simplifies setup by automatically configuring network settings
- Motion detection to trigger recording and send e-mail alerts
- DDNS support for web access using an easy-to-remember domain name
- Administrator/User password protection
- UPnP support for easy network setup and configuration
- 1 lux CMOS sensor for low-light environments
- 3GPP mobile surveillance
- Simultaneous MJPEG and MPEG-4 streams allows optimization of both image quality and bandwidth efficiency
- 802.11g/n wireless connectivity (DCS-5222L)
- WPS support for easy wireless network setup (DCS-5222L)

# Features

- **Simple to Use:** The DCS-5222L/DCS-5211L is a stand-alone system with a built-in CPU, requiring no special hardware or software such as PC frame grabber cards. Setup is simple, with mydlink-enabled technology which helps automatically configure your camera's network settings, eliminating the need to set complicated settings on your router.
- **Supports a Variety of Platforms:** The DCS-5222L/DCS-5211L 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.
- **Remote Snapshot Images and Recording:** Using the snapshot and recording features on the DCS-5222L/DCS-5211L, it is possible to save snapshots and record video and audio directly from the web browser to a local hard drive, without installing any software, making it convenient to capture any moment from a remote location.
- **Record Directly to a NAS:** The DCS-5222L/DCS-5211L allows you to record directly to a local network area storage device without the use of a dedicated PC for storing recorded video.
- **Low Light Recording:** The DCS-5222L's infrared light illumination allows the capture of video in rooms with minimal lighting, making it ideal for use in low-light environments.
- **Web Configuration:** Using a standard Web browser, administrators can configure and manage the Network Camera directly from its own Web page via Intranet or Internet.
- **Broad Range of Applications:** With today's high-speed Internet services, the DCS-5222L/DCS-5211L Network Cameras can provide an ideal solution for live video over the Intranet and for remote monitoring. The DCS-5222L/DCS-5211L allow remote access from a Web browser for live image viewing and management of the network cameras anytime, from anywhere in the world. The network cameras have a wide range of applications, including industrial and public monitoring of homes, offices, banks, hospitals, child-care centers, and amusement parks.
- **802.11n Wireless Connectivity:** The DCS-5222L offers both 802.11n wireless and Ethernet/Fast Ethernet connectivity, making the DCS-5222L easy to integrate into your existing network environment. The DCS-5222L/DCS-5211L works with a Ethernet based network for traditional wired environments. The DCS-5222L also works with 802.11g/n/b routers or access points for added flexibility.

# Package Contents

<p><b>DCS-5222L or DCS-5211L Network Camera; and a Remote Control Unit</b></p>	
<p><b>Power Adapter</b></p>	
<p><b>CAT5 Ethernet Cable</b></p>	
<p><b>Quick Installation Guide</b></p>	
<p><b>CD-ROM</b></p>	
<p><b>Screw, wall and ceiling mount kit</b></p>	

If any of the above items are missing from your package, please contact your retailer.

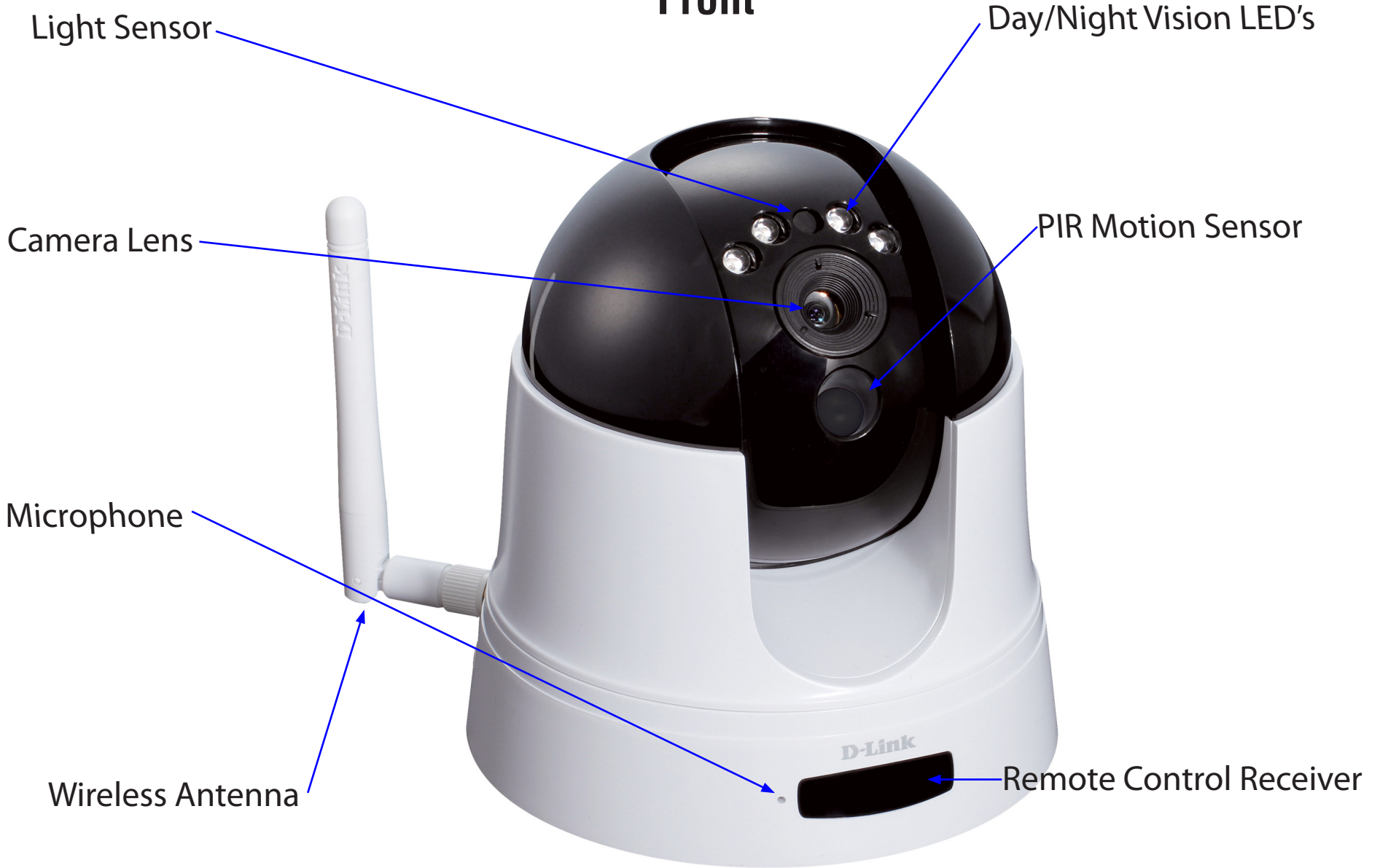
**Note:** Using a power supply with a different voltage rating than the one included with the DCS-5222L/DCS-5221L will cause damage and void the warranty for this product.

# System Requirements

<b>Network Requirements</b>	<ul style="list-style-type: none"> <li>• Wired (10/100/1000 Fast Ethernet) network</li> <li>• Wireless 802.11g/n/b network (DCS-5222L only)</li> </ul>
<b>CD Setup Wizard Requirements</b>	<ul style="list-style-type: none"> <li>• An Internet connection</li> <li>• A router connected to your broadband modem</li> </ul> <p><b>Computer with the following:</b></p> <ul style="list-style-type: none"> <li>• A PC with a wired connection to your router</li> <li>• Windows® 7, Vista® (32/64-bit), or XP installed</li> <li>• Internet Explorer 6 or higher with ActiveX controls enabled</li> </ul>
<b>Web-based Configuration Utility Requirements</b>	<p><b>Computer with the following:</b></p> <ul style="list-style-type: none"> <li>• Windows® based operating system</li> <li>• An installed Ethernet adapter</li> </ul> <p><b>Browser Requirements:</b></p> <ul style="list-style-type: none"> <li>• Internet Explorer 7.0 or higher</li> <li>• Firefox 3.0 or higher</li> <li>• Safari 3.0 or higher</li> </ul> <p><b>Windows® Users:</b> Make sure you have the latest version of Java installed. Visit <a href="http://www.java.com">www.java.com</a> to download the latest version.</p>
<b>myDlink Website Requirements</b>	<ul style="list-style-type: none"> <li>• Subscription with an Internet Service Provide (ISP) with 256 Kbps minimum for remote video viewing</li> <li>• Computer with: Microsoft Internet Explorer 6 or higher with ActiveX Support</li> </ul>

# Hardware Overview DCS-5222L

## Front



# Hardware Overview DCS-5222L

## Back

### Audio Out

Connect headphones/speakers to provide audio out .

### I/O Connector

Connect an I/O cable to the DCS-5222L.

### Ethernet port

Connects to a PC or network through an Ethernet connection.

### Power jack

Connects to the power adapter.

### Wireless Antenna

### WPS Button

### Micro SD

Insert Micro SD card here.

### Reset Button

Press and hold to reset to factory standard.



# Hardware Overview DCS-5211L

Front





# Hardware Overview DCS-5211L

## Back

### Audio Out

Connect headphones/speakers to provide audio out .

### I/O Connector

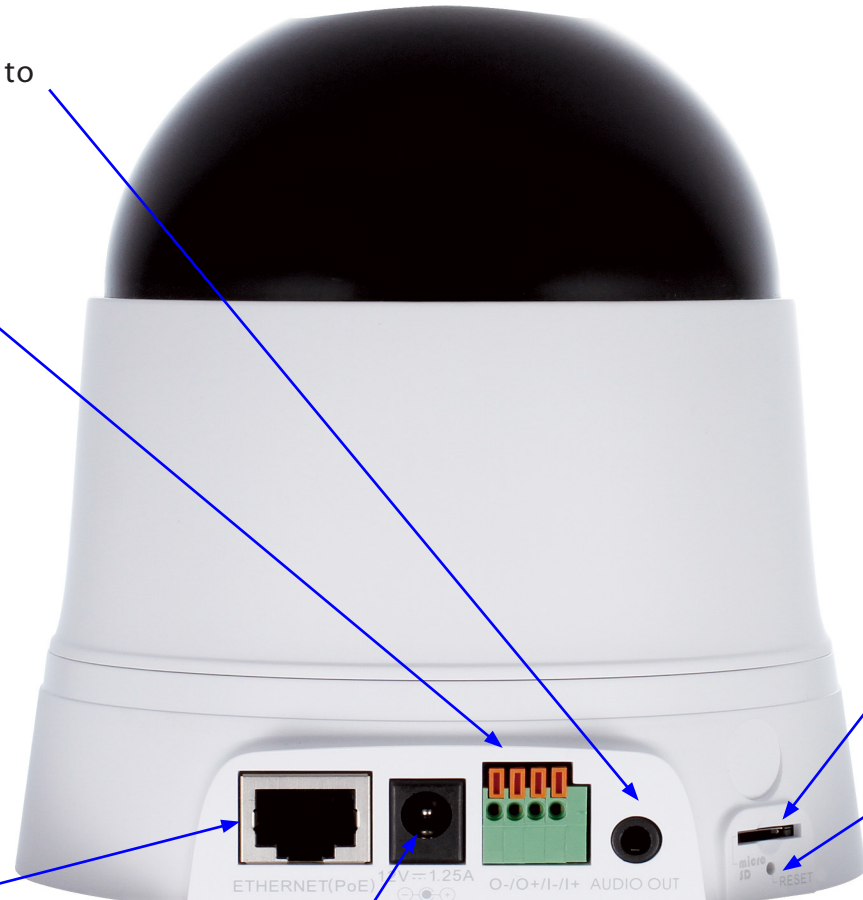
Connect an I/O cable to the DCS-5211L.

### Micro SD

Insert Micro SD card here.

### Reset Button

Press and hold to reset to factory standard.



### Ethernet port

Connects to a PC or network through an Ethernet connection.

### Power jack

Connects to the power adapter.

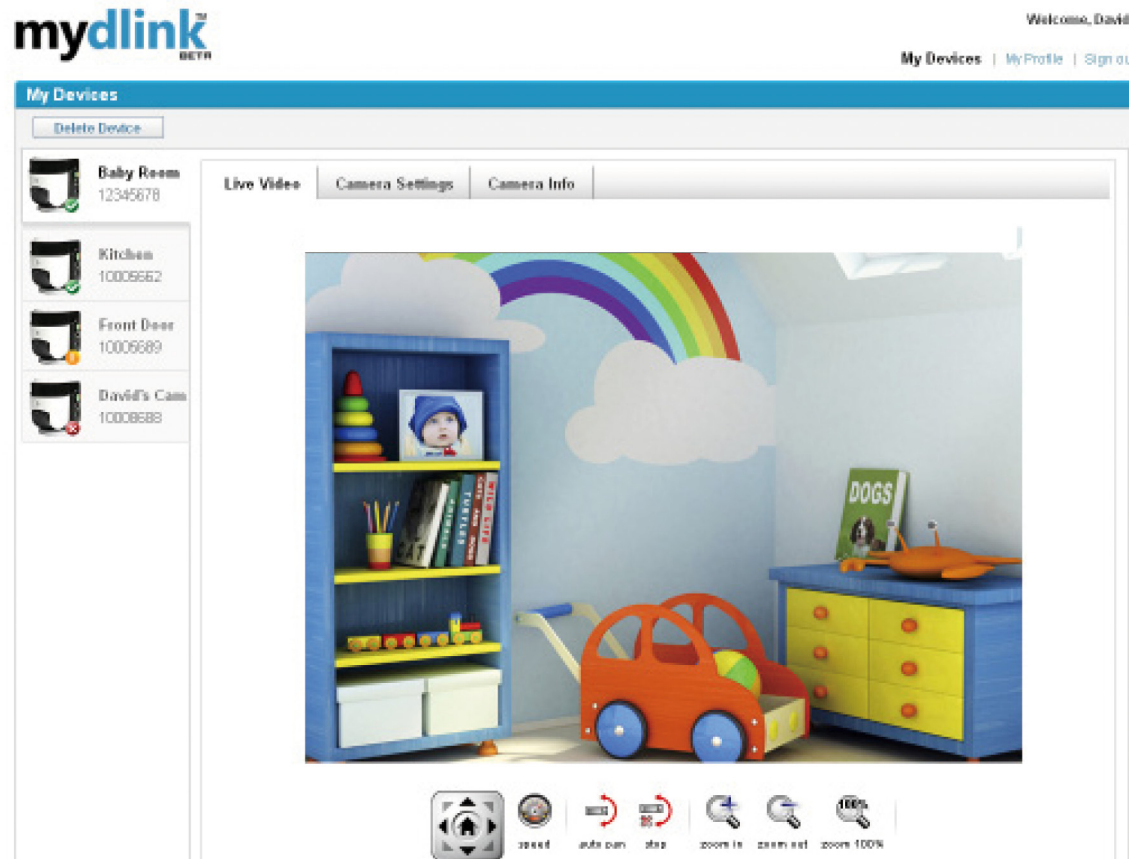
# Wireless Installation Considerations

The DCS-5222L Network Camera can be connected to your network wirelessly from anywhere within its operating range. However, keep in mind that there are factors that affect the signal strength and range of your connection. The number of objects the signal must pass through, together with the number of radio frequencies in the area, will have an effect on the range of your signal. Remember these tips to maximize the wireless range of your network:

- Keep the number of obstacles, such as walls or ceilings, that the signal must pass through to a minimum. Each wall or ceiling that the signal must pass through will have an adverse effect on the range of your network.
- Please be aware of the direct and non direct lines between devices. A wall that is at an angle will have a greater surface area for the signal to pass through than a wall not at an angle to the devices.
- Building materials can make a difference. Try to position access points, routers and computers in such a way that the signal passes through open doors or drywalls. Materials such as glass, metal, steel, walls (with insulation ), water (such as fish tanks), brick and concrete will degrade your wireless signal.
- Keep the network camera at least 3 - 6 feet (1-2 meters) away from other devices which generate radio frequencies.
- If you are using a 2.4GHz cordless phone or other radio frequency source such as a microwave oven close to your wireless devices, your wireless signal may degrade or fail. It is advisable to keep the base station of your cordless phone as far away as possible from the camera, the base station may transmit a signal even if the phone is not in use.

# mydlink Portal

After registering your DCS-5222L camera with a **mydlink** account in the Camera Setup Wizard. You will be able to remotely access your camera from the [www.mydlink.com](http://www.mydlink.com) website. After signing in to your **mydlink** account, you will see a screen similar to the following:



# Camera Status

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

A green tick 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 offline and currently cannot be accessed remotely.



If your camera is offline, try the following:

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

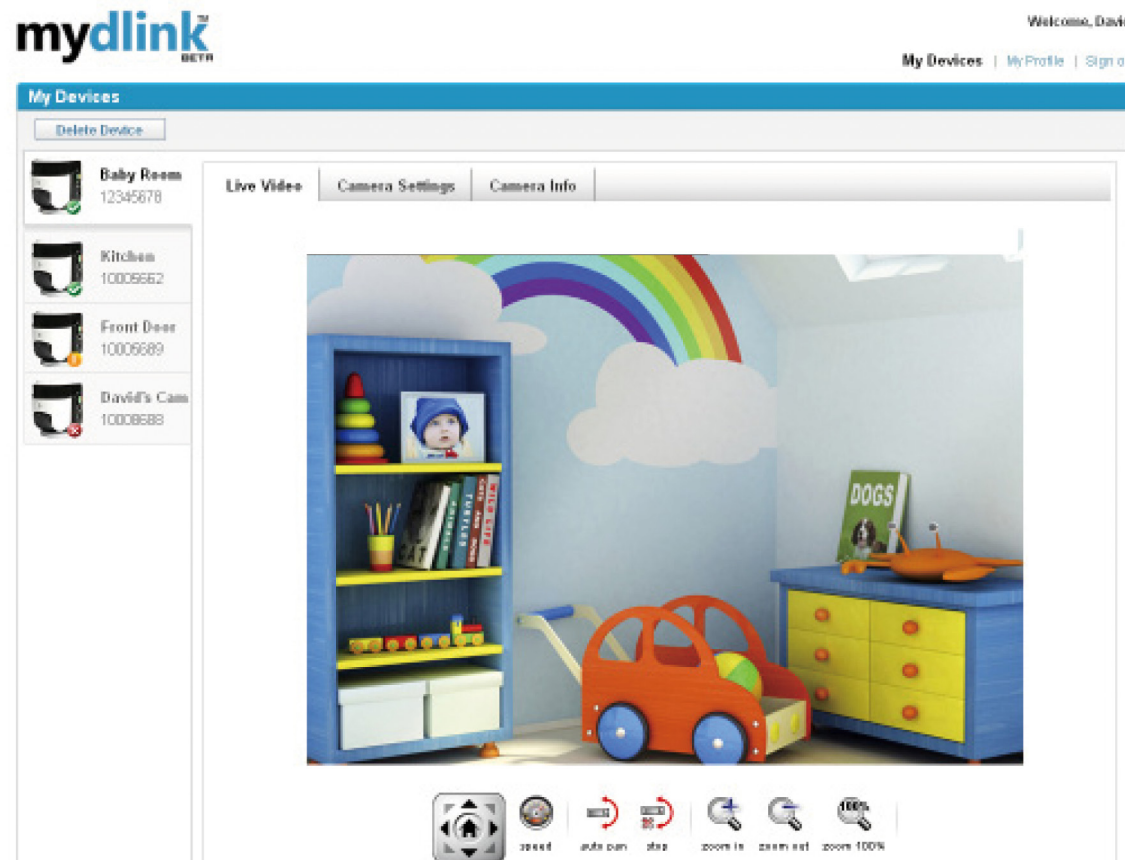
If you still cannot access your camera, reset your camera and run the Camera Setup Wizard again from the CD-ROM included in your package.

# Live Video

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

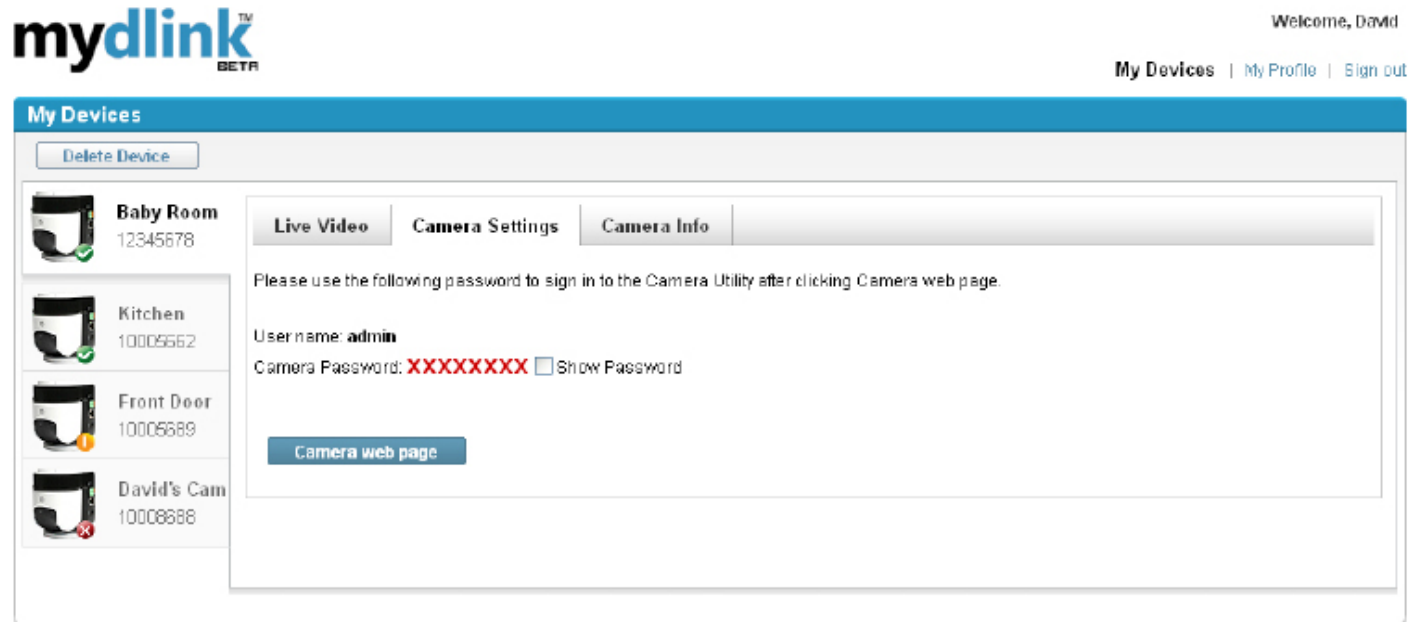
**Note:** If your router does not support UPnP, there will be a 60 second time limit when viewing your camera remotely.

**Maximum only allow 3 views for video feed at a time.**



# Camera Settings

The Camera Settings tab allows you to access your camera's configuration interface. To open your camera's configuration interface, click **Camera web page** and enter the password exactly as listed on the Camera Settings page.



The screenshot shows the mydlink portal interface. At the top left is the mydlink logo with 'BETA' underneath. At the top right, it says 'Welcome, David' and 'My Devices | My Profile | Sign out'. The main content area is titled 'My Devices' and contains a list of devices on the left and a configuration panel on the right. The devices listed are: 'Baby Room' (ID: 12345678), 'Kitchen' (ID: 10005652), 'Front Door' (ID: 10005689), and 'David's Cam' (ID: 10008888). The 'Camera Settings' tab is selected for the 'Baby Room' device. The configuration panel shows a message: 'Please use the following password to sign in to the Camera Utility after clicking Camera web page.' Below this, the 'User name' is 'admin' and the 'Camera Password' is 'XXXXXXXX' with a 'Show Password' checkbox. A 'Camera web page' button is located at the bottom of the configuration panel.

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# Camera Info

The Camera Info tab shows you various information about your camera.

**Device Name:** The Device Name is a unique name that you can give to your device to help you identify it. Clicking on the **Device Name** will open a window for you to log in to your camera's configuration interface. This will then open the Maintenance > Admin page where you can change your Device Name.

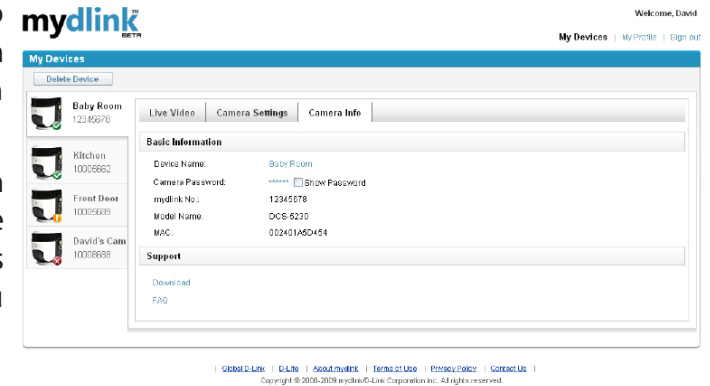
**Camera Password:** This shows you the current password for your camera's configuration interface. Clicking on the **Show Password** checkbox will either show or hide the password. Clicking on the **Password** will open a window for you to log in to your camera's configuration interface. This will then open the Maintenance > Admin page where you can change your Password.

**mydlink No.:** This shows you the mydlink number of your device.

**Model Name:** This shows you the model name of your device.

**MAC Address:** This shows you the MAC address of your device.

**Support:** This section provides you with links to various support websites and downloads related to your product.



# Installation

## Starting the Camera Setup Wizard

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

The CD-ROM will open the Camera Setup Wizard. Simply click **Start** to go through the Setup Wizard, which will help you through the entire installation process from connecting your hardware to configuring your camera.



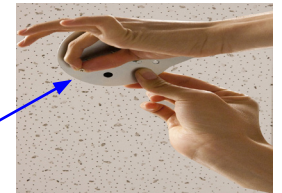
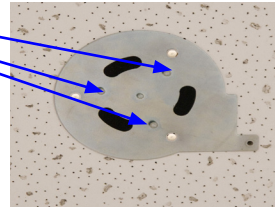


# Hardware Installation

## Wall and Ceiling Installation

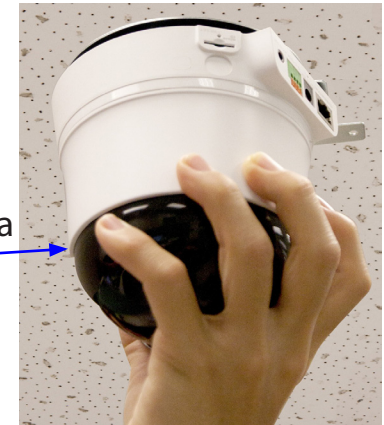
The device can be mounted on a wall or a partition. To install,

A) select the position that you want the camera to sit on the ceiling or floor. The plate should have the three ball catches facing downwards.



B) Using the provided screws; screw the mount to the wall or ceiling, with the correct tools, where the device is to be placed.

C) Holding the IP camera firmly, place the IP camera in the mount and swivel until secured.



## Inserting a Micro SD Card

Insert your Micro SD card into the  
Micro SD card slot on the DCS-5222L/DCS-



## Attaching a cable to the I/O Terminal.

The 4-pin I/O connector is located at the rear panel and provides an interface for photo-coupled switch output and photo-coupled input. An example of what can be done with a digital input and digital output is the connecting of a motion sensor to the port, signalling the camera to take a snapshot and trigger an alarm connected to the port.\*

(\*Further details and a technical specification can be found on page 51)



## Connect the Ethernet Cable

Connect one end of the blue Ethernet cables included in your package to the Ethernet port on the back of the DCS-5222L/DCS-5211L camera. Connect the other end of the cable to an available LAN port on your router or broadband modem.



**Connecting to a router**

## Connect the Power Adapter

Attach the power adapter to the power jack located on the back of the DCS-5222L/DCS-5211L and connect the power adapter to a power outlet. After connecting the power adapter, you should see the status LED on the front of the camera become red.

The status LED will light red when it receives power, will light green after the camera connects to the network, and will flash green when the camera is being accessed.



## Setting up a Wireless Connection with WPS

If your wireless access point or router supports push-button wireless protected setup (WPS), it is possible to quickly configure the wireless network and DCS-5222L camera without using the camera's web interface.

After plugging the power adapter to your camera and the front status LED lights up, hold down the WPS button next to the Micro SD card slot for 3 seconds.

Now press the WPS button on your router or access point within 1 minute to activate WPS and allow your devices to automatically configure a wireless connections.

Note: On some network routers/access points, WPS may need to be activated via the device setup or web-interface. Consult your product's user manual for further assistance.

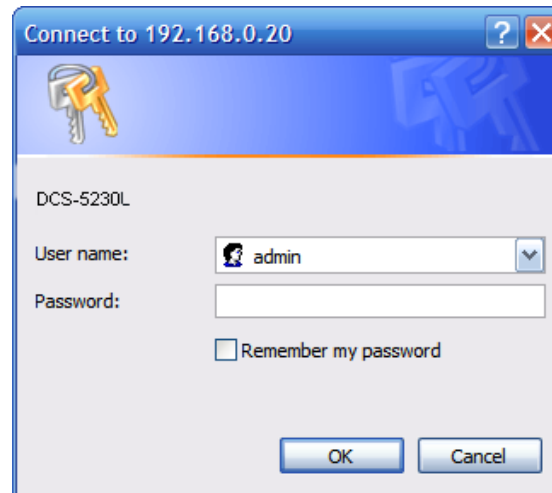


**Configuration via WPS**

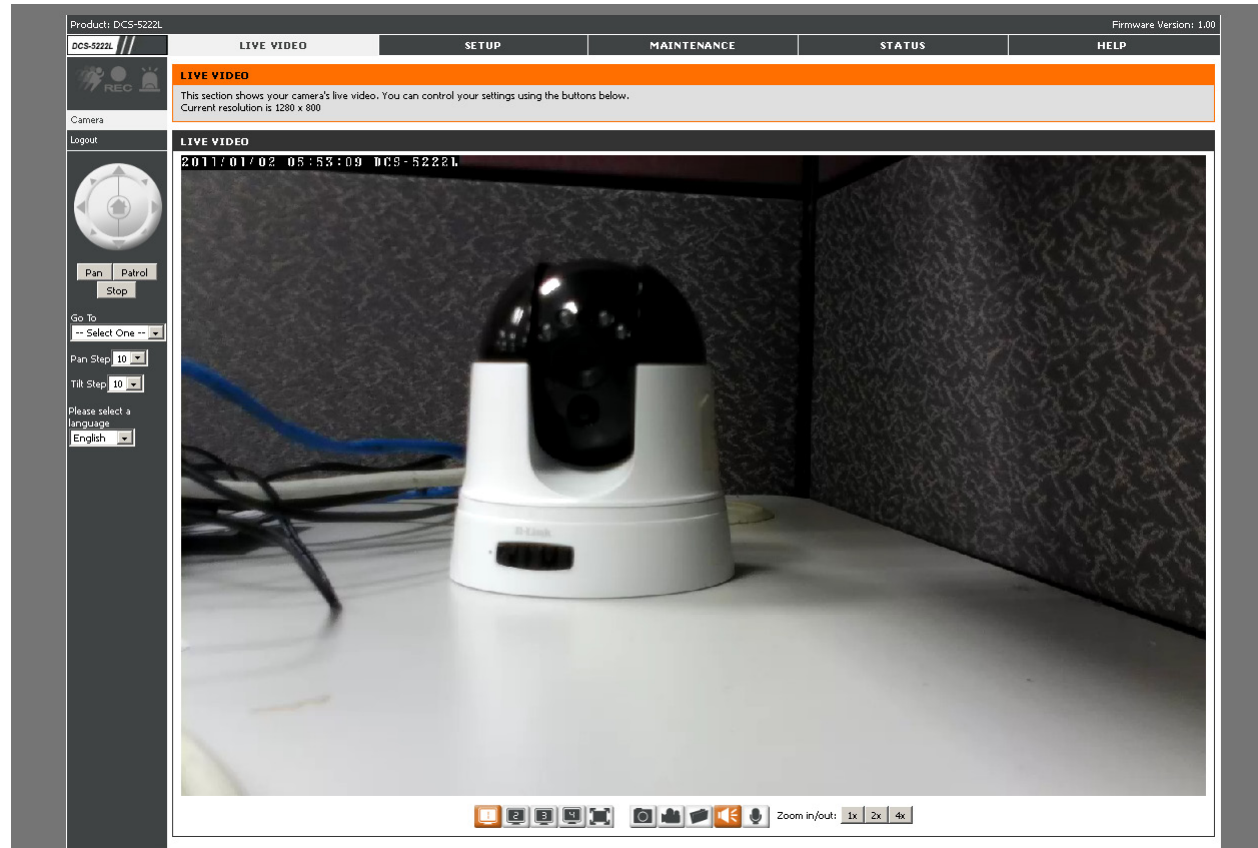
# Using the Configuration Menu

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-5222L/DCS-5211L. At the end of the wizard, click **Go To Camera**, or enter the IP address of your camera into a web browser, such as Internet Explorer®. To log in, use the User name **admin** and the password you created in the Setup Wizard. If you did not create a password, the default password is blank. After entering your password, click **OK**.

**Note:** If you are directly connecting your PC to the camera, or if you are using the camera on a closed network, the default IP is **192.168.0.20**.



# Web-based Configuration Utility



Use the following sections to set up and configure your network camera:

- LIVE VIDEO
- SETUP
- MAINTENANCE
- STATUS
- HELP

# Live Video Camera

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

You can remotely rotate, pan and tilt the camera pointing direction. In addition, you can also zoom in and out of the live video image using the controller. The pan/tilt speed can be adjusted on this page, and the "Go To" position can be configured at the Setup > Preset Position page.

**Start/Stop Audio:** This button toggles the built-in microphone on and off, allowing you to hear audio from the area surrounding your camera. Audio is on by default.



**Start/Stop Talking:** This will toggle audio to a speaker (not included) connected to the camera's Audio Out port. This can be used to communicate with others near the camera.



**Start/Stop Digital Output:** This button will toggle the digital output on or off.



**P/T/Z Action Pad:** Use the **Pan / Tilt / Zoom** Action Pad to control the camera's pan or tilt. The large tree icon controls the zoom in function. The small tree icon on the right side controls the zoom out function. The **Home** button can move the camera to the preset home position.

Select from the preset drop-down list to quickly move the camera to the desired preset position. (Please refer to "camera control" setup for the preset list function).

**Go To:**

This setting can change the camera's Pan/Tilt speed.

**Pan/Tilt Speed:**

Press this button and the camera will pan from left-most position to the right-most position and then return to its original position.

**Pan:**

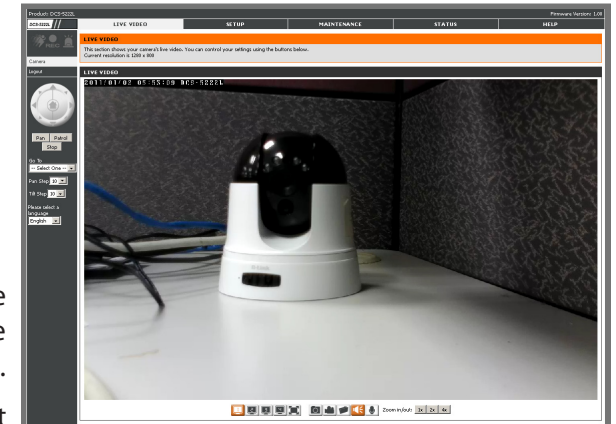
This will stop pan and patrol.

**Stop:**

**Patrol:**

Click this button to quickly move the camera to the desired patrol setup according to preset positions. (Please refer to "camera control" setup for the preset list function).

The bottom of this page contains several icons which can be used to control the camera's main functions.

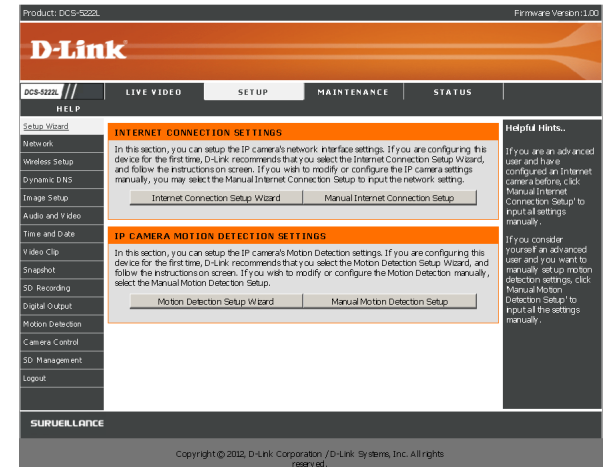




# Setup Wizard

The setup wizard guides you through the initial setup of your IP camera. You can use the **Internet Connection Setup Wizard** for initial network setup, and you can use the **Motion Detection Setup Wizard** to set up motion detection. Simply follow the instructions given in each step of the wizard to quickly set up your camera.

Alternatively, you can manually set up your Internet connection by clicking **Manual Internet Connection Setup**, and you can manually set up motion detection options by clicking on **Manual Motion Detection Setup**. You can also see these settings by clicking on the menu on the left panel (**Network Setup / Wireless Setup / Motion Detection / Snapshot**).



# Network Setup

This section allows you to configure your LAN and Internet configuration.

**Automatic IP Address Select:** This option is used if you are running a DHCP server on your network and would like an IP address assigned to your camera automatically by the DHCP server. If the DHCP server does not exist the IP camera will run with an auto address of 169.254.xxx.xxx, you may need to manually configure this setting should no DHCP server exist.

**Static IP Address:** This option is used to configure your IP Camera with an IP address which matches your network settings.

**HTTP Port:** This option allocates the HTTP port of the camera, allowing you to connect via a standard web browser, in this example picture (right) the port is set to 1111. The address used in a web browser could be (depending on the IP settings used in your network) 192.168.0.20:1111.

**RTSP Port:** This option allocates the RTSP port of the camera, the RTSP port allows connections using QuickTime or other streaming mobile devices.

**UPnP Enable:** UPnP (Universal Plug & Play) can be used to allow discovery of a camera as a UPnP device in the network, without additional configuration.

**UPnP Port Forward:** If the router being used supports UPnP, your camera and router can communicate allowing the router to discover which ports are used by each camera.

**Bonjour:** Enabling Bonjour will allow discovery of cameras by Apple computers.

**Note:** If you need to use a static IP address and you do not know the network information, contact your Internet Service Provider (ISP) for assistance.



**Note:** You *MUST* also set up your router/gateway for Port Forwarding/Mapping; this will enable remote viewing of your camera via the Internet. Please refer to your router's instruction manual on how to open up ports. For additional help on configuring your camera to work with your router, please refer to **Appendix A: Installing the DCS-5222L/DCS-5211L on a Router Without UPnP**. For installing multiple cameras, ONE port per camera must be opened on your router, the Web server (HTTP) port. Also, some browsers may restrict some ports, such as 1 or 22, for security purposes. If you have problems accessing your camera through HTTP, try using a port higher than 1024.

After making any changes, click the **Save Settings** button to save your changes, or click the **Don't Save Settings** button to discard your changes.

# Wireless

To set up your IP camera's wireless network interface settings, enable **Wireless Settings** in this window first. Then continue the further configuration next.

**Site survey:** Click the **Rescan** button to scan for available wireless networks. After scanning, you can use the drop down box to select an available wireless network. The related information (SSID, Wireless Mode, Channel, Authentication, Encryption) will be automatically filled in for you.

**SSID:** The SSID of the wireless access point you wish to use.

**Wireless Mode:** Use the drop down box to select the mode of the wireless network you wish to connect to. **Infrastructure** is normally used to connect to an access point or router. **Ad-Hoc** is usually used to connect directly to another computer.

**Channel:** If you are using Ad Hoc mode, select the channel of the wireless network you wish to connect to, or select **Auto**.

**Authentication:** Select the authentication you use on your wireless network - **Open, Shared (WEP), WPA-PSK, or WPA-PSK2**.

**Encryption:** If you use **WPA-PSK** or **WPA-PSK2** authentication, you will need to specify whether your wireless network uses TKIP or AES encryption. If you use **Open** or **Shared** authentication, this setting will be automatically set for you.

**Key:** If you use **WEP, WPA-PSK, or WPA-PSK2** authentication, enter the **Key** (also known as password) used for your wireless network.

After making any changes, click the **Save Settings** button to save your changes, or click the **Don't Save Settings** button to discard your changes.

The screenshot shows the D-Link web interface for the DCS-5222L camera. The top navigation bar includes 'LIVE VIDEO', 'SETUP', 'MAINTENANCE', and 'STATUS'. The 'SETUP' tab is active, and the 'Wireless Setup' option is selected in the left sidebar. The main content area is divided into two sections: 'WIRELESS SETUP' and 'WIRELESS CONFIGURATION'. The 'WIRELESS SETUP' section contains a 'Rescan' button and 'Save Settings' and 'Don't Save Settings' buttons. The 'WIRELESS CONFIGURATION' section has a 'Wireless' checkbox checked, a 'Network Name' field with 'dlink', a 'Site Survey' dropdown menu with '==SSID List==' and a 'Rescan' button, a 'Wireless Mode' dropdown menu with 'Infrastructure', a 'Security Mode' dropdown menu with 'None', a 'Key' text input field, a 'Show Hidden Key' checkbox, and an 'Antenna' section with 'Internal' selected and 'External' as an option. 'Save Settings' and 'Don't Save Settings' buttons are also present at the bottom of the configuration section.

# Dynamic DNS

If you have a DSL or Cable service provider that changes your modem IP address periodically, Dynamic DNS (Domain Name Service), a method of keeping a domain name linked to a dynamic IP address, is useful. With most Cable and DSL connections, you are assigned a dynamic IP address and that address is used only for the duration of that specific connection. With the DCS-5222L/DCS-5211L, you can set up your DDNS service and the DCS-5222L/DCS-5211L will automatically update your DDNS server every time it receives a different IP address. Depending on the service, this update may take a few hours.

**Enable DDNS:** Check this checkbox to enable the DDNS function of the camera.

**Server Address:** Use the drop down box on the right to select a DDNS service.

**Host Name:** Type in the Host Name of the DDNS service.

**User Name:** Enter your User Name for the DDNS service.

**Password:** Enter the password for the DDNS service.

**Confirm Password:** Retype the password for the DDNS service.

**Timeout:** This sets the number of hours between DDNS updates.

**Status:** Provides a status of enabled or disabled

After making any changes, click the **Save Settings** button to save your changes, or click the **Don't Save Settings** button to discard your changes.

DCS-5222L // LIVE VIDEO SETUP MAINTENANCE STATUS

HELP

Setup Wizard  
Network  
Wireless Setup  
Dynamic DNS  
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Audio and Video  
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SD Recording  
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Motion Detection  
Camera Control  
SD Management  
Logout

### DYNAMIC DNS

The Dynamic DNS feature allows you to use a domain name that you have purchased (www.yourdomain.com) to access your camera with a dynamically assigned IP address. Most broadband Internet service providers assign dynamic (changing) IP addresses. By using a DDNS service, you can enter your domain name to connect to your camera no matter what your IP address is.  
Sign up for D-Link's Free DDNS service at <http://www.DlinkDDNS.com>

Save Settings Don't Save Settings

### DYNAMIC DNS SETTING

DDNS

Server Address  << Select DDNS Server

Host Name

User Name

Password

Confirm Password

Timeout  hours

Status Disabled

Save Settings Don't Save Settings

# Image Setup

The options in **Image Setup** allow you to adjust the settings for your IP camera sensor and image.

**Brightness:** This adjusts the brightness of the camera image. This is set to 50 by default.

**Saturation:** This adjusts the color saturation. Saturation controls the strength of color in the image. This is set to 50 by default.

**Contrast:** This adjusts the contrast of the camera image, making a dull image sharper or a bright image smoother. This is set to 50 by default.

**Hue:** The Hue controls the different degree of color stimulation in the camera image. This is set to 50 by default.

**Frequency:** This option adjusts the camera sensor's setting to avoid the image flickering under certain light sources, such as florescent lights. This is set to **Auto** by default.

**White balance:** You can change the white balance of the camera image by selecting a setting from the drop down box. This is set to **auto** by default.

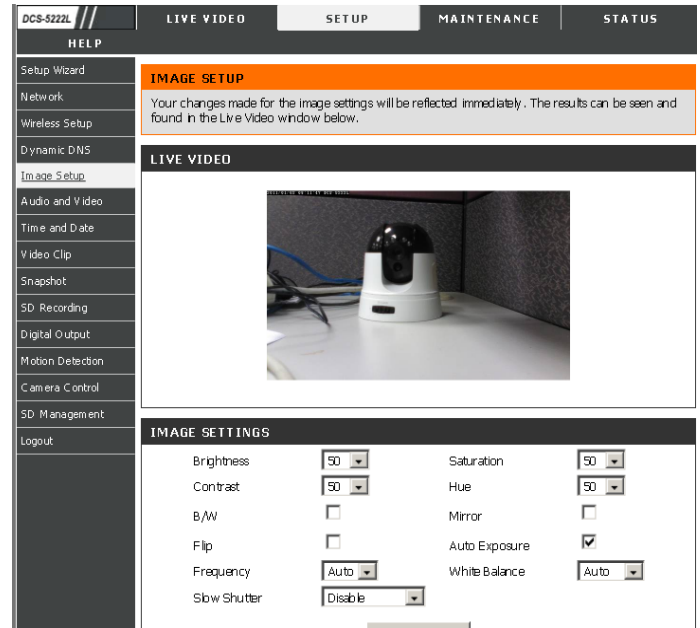
**B/W:** Ticking this checkbox will change the camera image into black and white.

**Flip:** This will flip the image vertically.

**Mirror:** This will flip the image horizontally in such a way that your left side will be on the left side of the screen and vice versa.

**Slow shutter:** This can be used to allow manual control of the shutter speed. Select slower shutter speeds when environment is dimly lit, faster speeds are required when in brighter lighting.

**Note: Mirror and Flip** can be used if you choose to mount the DCS-5222L/DCS-5211L upside down on the ceiling.



# Audio and Video

You may configure four video profiles with different settings for your camera. You may also set up different profiles for your computer and mobile display. In addition, you may configure the audio (speakers and microphone) settings for your camera. There are three sensor output selections (VGA, XGA, and SXGA). Do not select SXGA if you want to turn on the motion detection feature.

**Encode Type:** This sets the video codec used for the video stream. You can choose H.264, MPEG4 or MJPEG(JPEG). Internet Explorer browsers can view both H.264, MPEG4 or MJPEG(JPEG) video streams, and non-IE browsers can only view MJPEG video streams.

**Resolution:** This sets the display resolution of the video stream. If the Resolution is different than the Sensor Output size, the video will be shrunken or enlarged to the Resolution size you set here.

**FPS:** This sets the target number of frames per second (FPS) for the video stream. Higher frame rates will provide smoother video, lower frame rates will use less network bandwidth.

**bps:** This sets the target bit-rate of the video stream. Higher bit-rates will provide better quality video but could result in slower network transfers. When the Encode Type is set to MJPEG, you will be unable to change the bps setting. Available bps settings may also change depending on what the Encode Type, Sensor Output, Resolution, and FPS settings are set to.

**RTSP URL:** This setting allows you to set a suffix for your camera's RTSP URL, allowing the camera's video to be viewed with this video profile's settings. For example, if "mpeg4" is used as the RTSP URL setting and the camera's IP is 192.160.0.20, the camera's video can be viewed with these settings using 192.160.0.20/mpeg4.

**Note:** Video Profile 3 is always set to MJPEG as the Encode Type to ensure that at least one of the Video Profiles are viewable by non-IE browsers. Video Profile 4 is for mobile devices only, and always uses MPEG-4 as the Encode Type.

The screenshot shows the 'AUDIO AND VIDEO' configuration page for a DCS-5222L camera. The interface includes a navigation menu on the left with options like 'Setup Wizard', 'Network', 'Wireless Setup', 'Dynamic DNS', 'Image Setup', 'Audio and Video', 'Time and Date', 'Video Clip', 'Snapshot', 'SD Recording', 'Digital Output', 'Motion Detection', 'Camera Control', 'SD Management', and 'Logout'. The main content area is titled 'AUDIO AND VIDEO' and contains a warning message: 'You may configure audio and video settings (4 video profiles) here. Profile 3 has been set for snapshot, and profile 4 is set for your mobile phone or PDA device.' Below this are four video profiles:

Profile	Encode Type	Resolution	FPS	Encode Method	bps	RTSP URL
VIDEO PROFILE 1	H.264	1280x800	30	CBR	4 Mbps	play 1.sdp
VIDEO PROFILE 2	H.264	640x400	10	CBR	1 Mbps	play 2.sdp
VIDEO PROFILE 3	MJPEG	640x400	10	Quality	Good	play 3.sdp
VIDEO PROFILE 4 (FOR MOBILE DEVICE ONLY)	MPEG4	320x192	5	CBR	384 kbps	3app

Below the profiles is the 'DAY/NIGHT MODE' section with a dropdown menu set to 'Auto'. The 'AUDIO SETUP' section includes checkboxes for 'Speaker' and 'Microphone', both of which are checked, and volume sliders for each, both set to 100. At the bottom of the configuration area are 'Save Settings' and 'Don't Save Settings' buttons.

**Day/Night Mode:** Four options are available via the drop down menu. Auto lets the camera select use of or non-use of IR LED's in a low light area. Manual IR mode allows the user to manually select Day/Night mode. Always Day and Always Night force the camera into either Day or Night mode.

**Note that the live video will turn to black and white mode when IR LEDs turned on.**

**Speaker:** Checking this box will allow you to talk using the PC's microphone. The drop down menu allows volume control.

**Microphone:** Checking this box will enable listening to audio captured by the camera's microphone. The drop down menu allows volume control.

***Note:** Higher frame size, frame rate and bit rates will give you better video quality, but they will also require more network bandwidth. For best viewing results on a mobile phone, we suggest setting the frame rate to 5 fps and the bit rate to 20 Kbps.*

After making any changes, click the **Save Settings** button to save your changes, or click the **Don't Save Settings** button to discard your changes.



# Motion Detection

This option allows you to set up Motion Detection on your IP camera. In order to use motion detection first check the **Enable Video Motion** checkbox. Next, click on the video window and draw motion detection zones by clicking and dragging the mouse cursor. Red areas indicate areas that will be monitored for motion. The camera also has a PIR sensor which is used to detect motion using a special infrared sensor. PIR is good at detecting motion from live subjects such as people and animals.

**Enable PIR:** Tick this box to enable the PIR sensor.

**Enable Video Motion:** Tick this box to enable video motion detection.

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

**Draw Motion Area:** This will allow you to draw motion detection zones when clicking and dragging, or erase motion detection zones when clicking and dragging depending on which option you have selected.

**Erase Motion Area:** Clicking this button will clear all motion detection zones.

After making any changes, click the **Save Settings** button to save your changes, or click the **Don't Save Settings** button to discard your changes.

**Note:** If the camera is set to SXGA mode in Audio and Video, Motion Detection is disabled.

The red grid on the right indicates an area that has been selected for motion detection.

When motion is detected, the LIVE VIDEO page will display a blinking orange motion video icon like the one below.

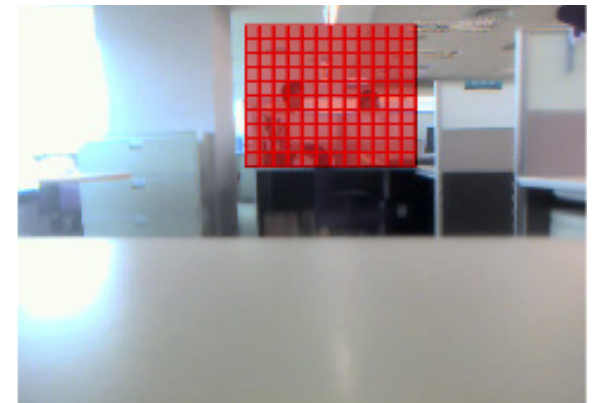
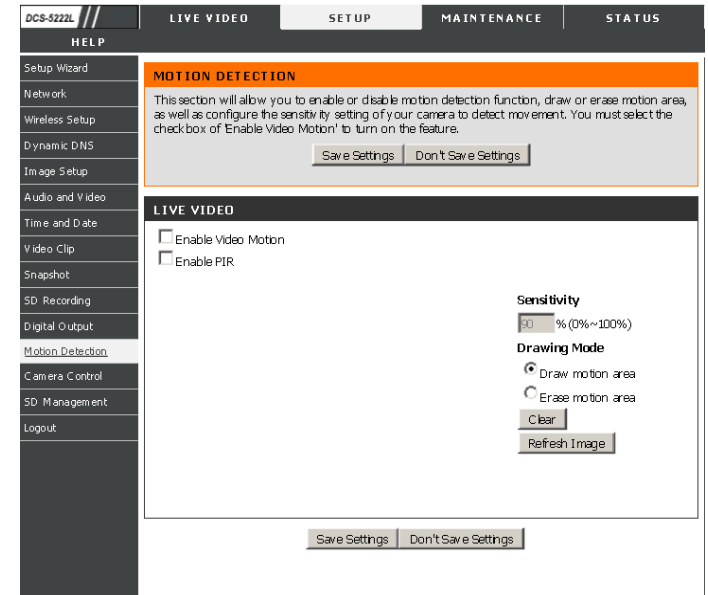


No Motion



Motion

The motion notification will continue to blink as long as motion is detected. If no additional motion is detected, it will return to its original state after eight seconds.



## Time and Date

This option allows you to configure, update, and maintain the correct time on the internal system clock. From this section you can set the time zone that you are in and set the NTP (Network Time Protocol) Server. Daylight Saving can also be configured to automatically adjust the time when needed.

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

**Enable Daylight Saving:** If your region uses a Daylight Saving adjustment, check this checkbox.

**Auto Daylight Saving:** This option will adjust Daylight Saving Time automatically.

**Set date and time manually:** Selecting this will let you set the Daylight Saving Time adjustment manually:

- **Daylight Saving Offset:** This will set the Daylight Saving adjustment that will be used.
- **Daylight Saving Date:** This will set the beginning and ending dates of the Daylight Saving period.

You can also have the camera's clock set automatically, or manually.

**Synchronize with NTP Server:** Checking this checkbox will allow the camera to synchronize its clock with an NTP server.

**NTP Server:** Use the drop down box to the right to select an NTP server to use, or you can type one in.

**Set date and time manually:** Check this checkbox to set the time and date manually. You can then use the drop down boxes to select the current **Year, Month, Day, Hour, Minute,** and **Second**. You can also click the **Copy Your Computer's Time Settings** button to automatically fill in the drop down boxes with the current time and date from your computer.

After making any changes, click the **Save Settings** button to save your changes, or click the **Don't Save Settings** button to discard your changes.



# Camera Control

Click the **Preset Position** button from the left side of the Setup screen to access settings that affect how the DCS-5222L Internet Camera can pan and move to preset locations.

**Pan Step** Select the speed at which the camera will pan for a full cycle from the drop-down list. Select a value between 0 and 10, 0 being the slowest setting.

**Tilt Step:** Select the speed at which the camera will tilt for a full cycle from the pull down menu. Select a value between 0 and 10, 0 being the slowest setting.

**Preset Position:** Enter a name for the position at which you would like to preset the DCS-5222L. Click **add** to add the new preset position to the Preset Locations list .

**Preset Position:** Using the drop-down list, you can choose and delete a preset position by selecting it and clicking **Delete**.

The screenshot displays the D-Link camera control web interface. At the top, there's a navigation bar with 'LIVE VIDEO', 'SETUP', 'MAINTENANCE', 'STATUS', and 'HELP'. The left sidebar contains a menu with options like 'Setup Wizard', 'Network Setup', 'Wireless Setup', 'Dynamic DNS', 'Image Setup', 'Audio and Video', 'Motion Detection', 'Time and Date', 'Preset Position', 'Recording', 'Snapshot', 'Digital Output', 'SD Card', and 'Logout'. The main content area is titled 'CAMERA CONTROL' and includes a live video feed of a yellow potted plant. To the right of the video is a directional pad for camera movement. Below the video are controls for Home Definition (Set as Home, Default Home), Pan Speed (10), and Tilt Speed (10). There are also fields for Current Position, Preset Position (with a dropdown menu), Patrol Selection, and Selected Locations. The interface is titled 'CAMERA CONTROL' and includes a navigation menu on the left and a 'SECURITY' footer.

**Set as Home:** Use the **Set As Home** button to set the current position as the home position. The Home position is the first position the camera goes to after the camera boots. You can also recall the default home position, use the **Default Home** button.

**Patrol Selection:** To use the Auto Patrol feature, select the desired preset positions from the Preset Locations list and add them to the Selected Locations list by clicking **Select**. You can then select the order in which the camera will patrol through the preset locations by selecting a location and clicking **Up** or **Down**. Click **Remove** to remove a location from the list.

# SD Recording

This option allows you to configure recording settings and scheduling. You can record video to a Samba network drive on your local network.

**Enable recording:** Check this checkbox to enable the recording feature. After enabling recording, you will need to select a scheduling method.

**SD Card:** Select this option if you have inserted an available SD card into the camera.

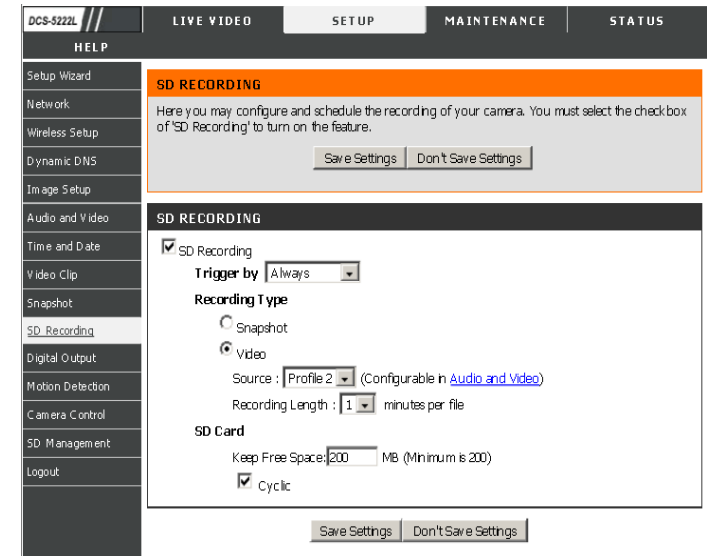
**Trigger byMotion:** Trigger byMotion begins SD recording after a motion is detected. Schedule SD recording in a specified time.

**Recording Type:** It is possible to set the recording codec, set pre-event recording, and post-event recording here when Trigger by is activated. You can also select recording as Snapshot or Video.

**Recording Length:** Use this to set the time length of each recording video.

**Keep Free Space:** This sets the capacity of your local SD Card to prevent the system from becoming unstable.

**Cyclic:** When this option is selected, it will cause the oldest folder to be deleted when the system requires storage space for new files.



## Video Clip

Video Clip is the ability to store or send video clips to a remote E-mail or FTP server based on motion detection, external sensor input triggered.

**Trigger by Motion:** This begins video clipping after a motion is detected. It is possible to schedule video clipping at a specified time, continuously or after digital input is detected. Use the drop down menu to configure appropriate mode.

**Video Clip Type:** The video clip type can be set to video clip codec, Pre-event recording and Maximum duration here.

**Pre-event recording:** It is possible to specify how many seconds of video will be recorded, before the video clip is taken.

**Maximum duration:** This specifies how many seconds of video clipping is taken.

**Target** it is possible to select the target as FTP or E-mail for the video clipping.

Product: DCS-5222L

**D-Link**

DCS-5222L // LIVE VIDEO SETUP MAINTENANCE STATUS

HELP

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SD Management  
Logout

**VIDEO CLIP**

Video Clip is a feature to send video clips via FTP or E-Mail when a trigger is activated.  
(The target can't be select both FTP and E-mail for the video clip.)

Save Settings Don't Save Settings

**VIDEO CLIP**

Video Clip

Trigger by: Always

Video Clip Type  
Source: Profile 2 (Configurable in [Audio and Video](#))

Pre-event recording: 5 Seconds (Between 0 to 5 seconds)

Maximum duration: 10 Seconds (Between 5 to 10 seconds)

Target

FTP  
 E-mail

Save Settings Don't Save Settings

# Snapshot

Here, you can set the camera to take snapshots when motion is detected. Snapshots can be sent to an e-mail address and/or to an FTP server.

**Trigger by:** The motion drop down menu selection begins snapshot after a motion is detected. Schedule Snapshot schedules the snapshot at a specified time. Always Continuous Snapshot provides continuous snapshots. Digital Input begins taking snapshots after a digital input is detected.

**Snapshot Type:** It is possible to set snapshot codec from Profile 3(JPEG), Single snapshot or 6 snapshot here.

**6 snapshot:** Select this option to take continuous 6 pictures for each snapshot.

**Target:** It is possible to select the target as FTP or E-mail for the snapshot.



# Digital Output

You can enable the digital output port as well as configure the trigger event.

**Motion Detection:** When a motion detection is triggered.

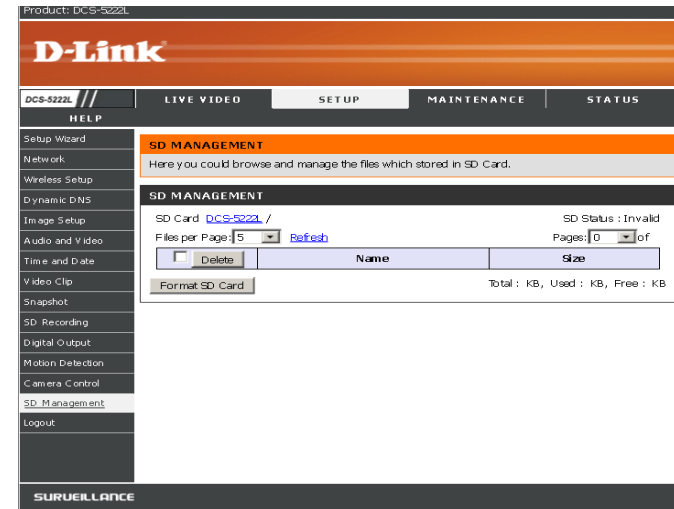
**D/I Signal:** A trigger from the Digital Input port.





# SD Management

Clicking “Format SD Card” will delete all data from the SD card, and create folder for video.



**Format SD Card:** To format the SD card. Delete all data from the SD card.

**Name:** The name of file or catalog.

**Num of files:** The amount of files in catalog.

**Size:** The file's size.

**Refresh:** Click it reload data to webpage.

**Top Level:** Click it go back to previous level.

**Delete:** Click this button to select all the files below.

**OK:** Click this button to delete the selected files above.

# Maintenance

## Admin

Here you can change the Admin password, add and manage Users, and adjust some camera settings.

**Admin Password Setting:** This section lets you change the admin password used to log in to the camera and adjust settings. After installing the camera for the first time, it is highly recommended that you change the admin password for security purposes.

**New Password:** Enter the new admin password.

**Retype Password:** Enter the new admin password again for verification. After entering the new password again, click on the **Save** button to save your changes.

**Add User Account:** Admin can create user accounts to allow others to log in to your camera to view the live camera feed.

**User Name:** Enter the User Name you wish to use for the new user account.

**New Password:** Enter the password for the new user account.

**Retype Password:** Re-enter the password for the new user account for verification. After entering the password again, click **Add** to add the new user account.

**User List:** Here, you can view the current list of users by using the drop down box. You can also delete a user by selecting them with the drop down box, and then clicking the **Delete** button.

**Device Setting:** Here, you can change various other settings for your camera.

**Camera Name:** Enter the name of your camera.

**Enable OSD:** This will enable the information bar On Screen Display (OSD) to appear when viewing video.

**Label:** This is the text label that will appear on the OSD.

**Show time:** If checked, the current time will be displayed on the OSD.

**LED light:** This will turn the camera's front LED indicator on or off.

**Calibrate the Device:** Clicking this button will calibrate the camera so that the P/T/Z apparatus functions correctly. The camera is automatically calibrated whenever it is powered on and initialized or reset. Should the camera's pan, tilt, and zoom functions begin to behave incorrectly, or if the device has been jarred or handled improperly, you may need to recalibrate the camera manually by pressing this button.

**Privacy Mode:** Select on/off or schedule the privacy mode for your camera to ensure the privacy. When the privacy mode is turned on, the camera hides the lens by rolling it back into the unit.

After making any changes to this section, click the **Save** button to save your changes.

The screenshot displays the D-Link camera web interface. At the top, it shows the product name 'DCS-5222L' and the D-Link logo. Below the logo is a navigation bar with tabs for 'LIVE VIDEO', 'SETUP', 'MAINTENANCE', and 'STATUS'. The 'MAINTENANCE' tab is selected, and the 'ADMIN' sub-tab is active. The main content area is titled 'ADMIN' and contains several sections:

- ADMIN PASSWORD SETTING:** Fields for 'Old Password', 'New Password', and 'Confirm New Password', each with a '30 characters maximum' warning. A 'Save' button is at the bottom.
- ADD USER ACCOUNT:** Fields for 'User Name', 'New Password', and 'Confirm New Password', each with a '30 characters maximum' warning. An 'Add' button is at the bottom, with a '30 users maximum' warning.
- USER LIST:** A table with a 'User Name' column and a 'Delete' button.
- AUTHENTICATION:** Checkboxes for 'RTSP Authentication', 'HTTP Authentication', and 'Snapshot URL Authentication'. A 'Save' button is at the bottom.
- DEVICE SETTING:** Fields for 'Camera Name' and 'Label', each with a '36 characters maximum' warning. A 'Time Stamp' checkbox is checked. A 'Power/Link LED Light' dropdown is set to 'On'. A 'Save' button is at the bottom, and a 'Calibrate the Device' button is below it.
- PRIVACY CONTROL:** A 'Privacy Control' checkbox is checked. Radio buttons for 'Privacy Off' and 'Privacy On' are shown. A 'Save' button is at the bottom.

The bottom of the interface shows a 'SURVEILLANCE' tab.

# System

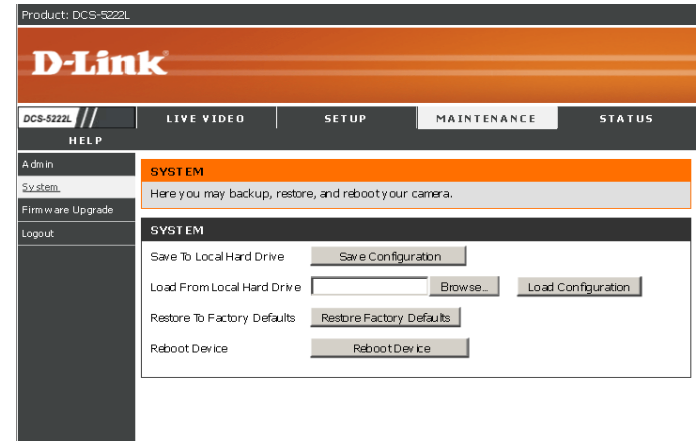
This screen allows you to save and restore the camera's current configuration. You can also reset all settings to factory default or reboot the device.

**Save To Local Hard Drive:** Click on the **Save Configuration** button to save the current configuration to a hard drive.

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

**Restore To Factory Defaults:** Click this button to reset all settings to their factory defaults. If you choose to reset your settings, you will need to set up your camera again.

**Reboot Device:** Clicking the **Reboot** button will reboot your device.



# Firmware Upgrade

Your current firmware version and date will be displayed on this page. Here, you can also upgrade your firmware with a new version.

Firmware upgrades are made available at [support.dlink.com](http://support.dlink.com).

To upgrade your firmware, go to [support.dlink.com.tw](http://support.dlink.com.tw) and download the latest firmware to your computer's hard drive. Click on **Browse**, select the firmware file, then click the **Upload** button. While the firmware is being upgraded, do not turn off your computer or camera, and do not disconnect your network connection from your computer or camera. Upgrading the firmware will not change any of your system settings, but it is recommended that you save your system configuration before doing a firmware upgrade.

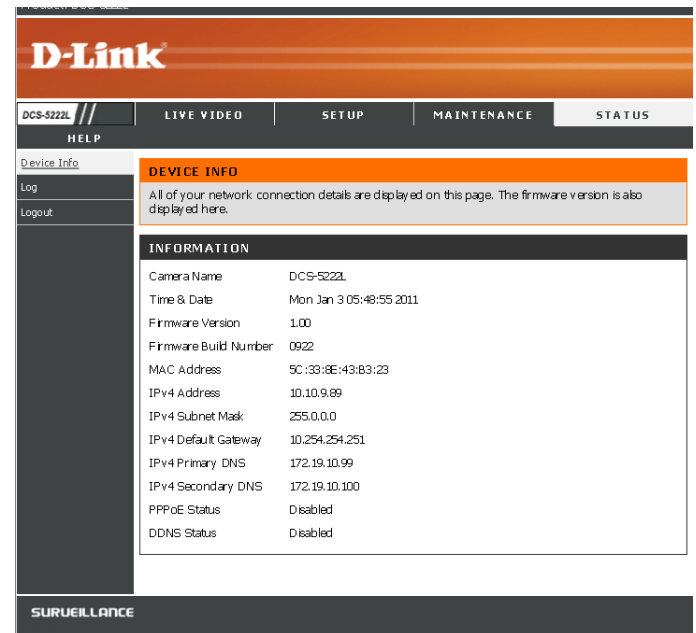
**Note:** *It is recommended that you use a wired connection for your computer and camera when upgrading the firmware.*



# Status

## Device Info

This screen shows you various information about your camera and its current settings.



The screenshot displays the D-Link camera web interface. At the top, the D-Link logo is visible. Below it, a navigation bar includes links for DCS-5222L, LIVE VIDEO, SETUP, MAINTENANCE, and STATUS. A HELP link is also present. The main content area is titled "DEVICE INFO" and contains a message: "All of your network connection details are displayed on this page. The firmware version is also displayed here." Below this message is an "INFORMATION" section with the following details:

INFORMATION	
Camera Name	DCS-5222L
Time & Date	Mon Jan 3 05:48:55 2011
Firmware Version	1.00
Firmware Build Number	0922
MAC Address	5C:33:8E:43:83:23
IPv4 Address	10.10.9.89
IPv4 Subnet Mask	255.0.0.0
IPv4 Default Gateway	10.254.254.251
IPv4 Primary DNS	172.19.10.99
IPv4 Secondary DNS	172.19.10.100
PPPoE Status	Disabled
DDNS Status	Disabled

At the bottom of the interface, there is a "SURVEILLANCE" label.

# Log

The log shows you a list of events that have happened recently. You can download the log by clicking the **Download** button, or you can empty the log by clicking the **Clear** button.

The screenshot shows the web interface for a DCS-5222L device. The top navigation bar includes 'LIVE VIDEO', 'SETUP', 'MAINTENANCE', and 'STATUS'. The left sidebar has 'Device Info', 'Log', and 'Logout'. The main content area is titled 'SYSTEM LOG' and contains the following text:

The system log records camera events that have occurred.

**CURRENT LOG**

2011-01-01 02:12:29 admin is streaming video.  
 2011-01-01 02:24:09 admin is streaming video.  
 2011-01-01 02:52:51 admin is streaming video.  
 2011-01-01 02:57:19 admin is streaming video.  
 2011-01-01 03:00:59 admin is streaming video.  
 2011-01-01 03:02:07 admin is streaming video.  
 2011-01-01 03:04:17 admin is streaming video.  
 2011-01-01 03:04:21 admin is streaming video.  
 2011-01-01 03:04:22 admin is streaming video.  
 2011-01-01 03:24:42 admin is streaming video.  
 2011-01-01 03:26:08 admin is streaming video.  
 2011-01-01 03:27:02 admin is streaming video.  
 2011-01-01 03:39:45 admin is streaming video.  
 2011-01-01 03:54:16 admin is streaming video.  
 2011-01-01 03:54:22 admin is streaming video.  
 2011-01-01 04:06:04 admin is streaming video.  
 2011-01-01 05:02:03 admin is streaming video.  
 2011-01-01 05:06:28 admin is streaming video.  
 2011-01-01 05:06:33 admin is streaming video.  
 2011-01-01 05:06:49 admin is streaming video.  
 2011-01-01 05:06:54 admin is streaming video.  
 2011-01-01 05:07:02 admin is streaming video.  
 2011-01-01 05:07:18 admin is streaming video.  
 2011-01-01 05:07:34 admin is streaming video.  
 2011-01-01 05:07:32 admin is streaming video.  
 2011-01-01 05:07:55 admin is streaming video.  
 2011-01-01 05:07:58 admin is streaming video.  
 2011-01-01 05:08:05 admin is streaming video.  
 2011-01-01 05:31:15 admin is streaming video.  
 2011-01-01 05:32:03 admin is streaming video.  
 2011-01-01 05:41:59 admin is streaming video.  
 2011-01-01 05:42:51 admin is streaming video.  
 2011-01-01 05:54:19 admin is streaming video.  
 2011-01-01 05:54:27 admin is streaming video.  
 2011-01-01 05:54:42 admin is streaming video.  
 2011-01-01 05:57:08 admin is streaming video.  
 2011-01-01 06:11:33 admin is streaming video.  
 2011-01-01 06:21:51 admin is streaming video.  
 2011-01-01 06:22:01 admin is streaming video.  
 2011-01-01 06:22:28 admin is streaming video.  
 2011-01-01 06:22:36 admin is streaming video.  
 2011-01-01 06:22:47 admin is streaming video.  
 2011-01-01 06:22:51 admin is streaming video.  
 2011-01-01 06:23:29 admin is streaming video.  
 2011-01-01 06:23:49 admin is streaming video.  
 2011-01-01 06:23:59 admin is streaming video.  
 2011-01-01 06:28:09 admin is streaming video.  
 2011-01-01 06:19:52 admin is streaming video.  
 2011-01-01 06:22:09 admin is streaming video.  
 2011-01-01 06:22:33 admin is streaming video.  
 2011-01-01 06:23:31 admin is streaming video.  
 2011-01-01 06:52:08 admin is streaming video.  
 2011-01-01 06:00:24 admin is streaming video.  
 2011-01-02 04:41:43 admin is streaming video.  
 2011-01-02 05:40:17 admin is streaming video.  
 2011-01-02 05:52:29 admin is streaming video.  
 2011-01-02 07:41:36 admin is streaming video.  
 2011-01-03 02:36:52 admin is streaming video.  
 2011-01-03 02:37:15 admin is streaming video.  
 2011-01-03 02:40:49 admin is streaming video.  
 2011-01-03 04:45:22 admin is streaming video.  
 2011-01-03 04:45:25 admin is streaming video.  
 2011-01-03 04:45:38 admin is streaming video.

At the bottom of the log area, there are two buttons: 'Clear' and 'Download'.

The footer of the page contains the text: 'SURVEILLANCE Copyright © 2012, D-Link Corporation / D-Link Systems, Inc. All rights reserved.'

# Help

The Help screen provides you with support information about the DCS-5222L/DCS-5211L for your reference.

## 1. Why can't I access the web-based configuration utility?

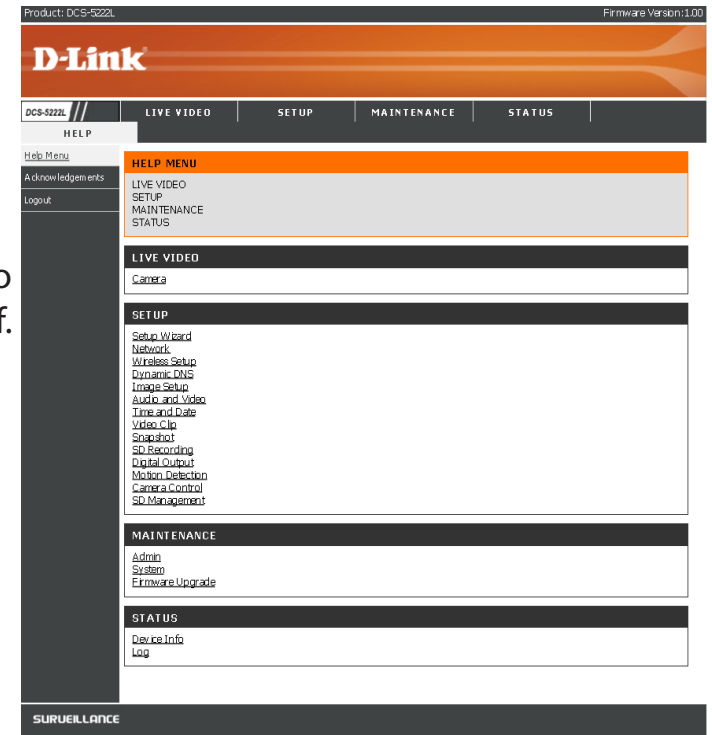
When entering the IP address of the D-Link router (192.168.0.1 for example), you are not connecting to a website on the Internet or have to be connected to the Internet. The device has the utility built-in to a ROM chip in the device itself. Your computer must be on the same IP subnet to connect to the web-based utility.

- Make sure you have an updated Java-enabled web browser. We recommend the following:

- Internet Explorer 6.0 or higher
- Firefox 1.5 or higher
- Netscape 8 or higher
- Mozilla 1.7.12 (5.0) or higher
- Opera 8.5 or higher
- Safari 1.2 or higher (with Java 1.3.1 or higher)

- Verify physical connectivity by checking for solid link lights on the device. If you do not get a solid link light, try using a different cable or connect to a different port on the device if possible. If the computer is turned off, the link light may not be on.

- Disable any Internet security software running on the computer. Software firewalls such as Zone Alarm, Black Ice, Sygate, Norton Personal Firewall, and Windows® firewall may block access to the configuration pages. Check the help files included with your firewall software for more information on disabling or configuring it.



- Configure your Internet settings:
  - Go to **Start > Control Panel**. In Windows® XP or Windows Vista™, make sure you are in Classic View. Double-click the **Internet Options** icon. From the **Security** tab, click the button to restore the settings to their defaults.
  - Click the **Connection** tab and set the dial-up option to **Never Dial a Connection**. Click the **LAN Settings** button. Make sure nothing is checked. Click **OK**.
  - Go to the **Advanced** tab and click the button to restore these settings to their defaults. Click **OK** three times.
  - Close your web browser (if open) and open it.
- Access the web management. Open your web browser and enter the IP address of your D-Link router in the address bar. This should open the login page for your the web management.
- If you still cannot access the configuration, unplug the power to the router for 10 seconds and plug back in. Wait about 30 seconds and try accessing the configuration. If you have multiple computers, try connecting using a different computer.

## 2. What can I do if I forget my password?

If you forget your password, you will need to perform a hard reset of your camera. This process will change all your settings back to the factory defaults.

To reset your camera, please use an unfolded paperclip to press and hold the RESET button for at least 6 seconds while your camera is plugged in.



# Troubleshooting

## 1. What can I do if I forget my password?

If you forget your password, you will need to perform a hard reset of your camera. This process will change all your settings back to the factory defaults.

To reset your camera, please use an unfolded paperclip to press and hold the **RESET** button for at least 6 seconds while your camera is plugged in.

Please note that this will also remove the camera from your mydlink account, so you will need to add it back to your account later.

## 2. In addition to using mydlink.com, is there another way to access my camera remotely over the Internet?

Yes, you can access your camera over the Internet through the following URL after successfully installing your camera through the Camera Setup Wizard:

**[http://\[mydlink No.\].dev.mydlink.com](http://[mydlink No.].dev.mydlink.com)**

For example, if your camera's mydlink No. was 12345678, you would be able to access your camera remotely by opening your web browser and going to <http://12345678.dev.mydlink.com>

This URL will open your camera's web interface, where you can sign in and configure your camera's settings.

# Technical Specifications - Remote Control Unit

## Feature

- Remote Controller : 3x3 key matrix
- Code system: NEC
- IR transmitter frequency: 38KHz
- Outline drawing below:

## Pan/ tilt direction key

Pressing pan/tilt direction key will move camera to the direction for a few steps.

## Home key

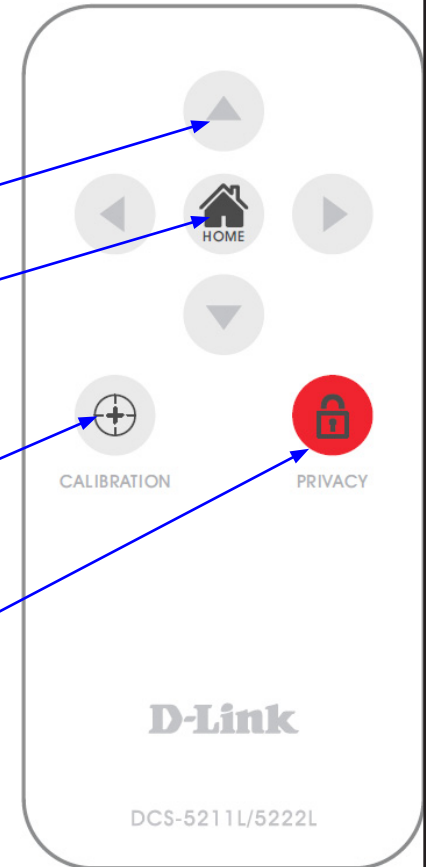
Pressing Home key will move camera to the home position, i.e., the center position calibrated last time or the position set by user.

## Calibrate key

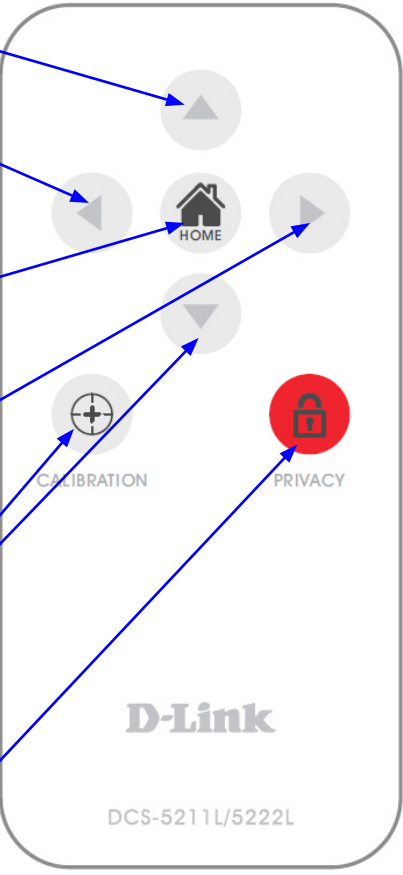
Pressing Calibrate key will do calibration of both pan and tilt position by moving from end to end where a position sensor is located and go to the corrected home position.

## Privacy key

Pressing privacy key will tilt to privacy position where camera is hidden in cover (privacy mode). Pressing again privacy key in privacy mode will tilt back to the previous position.



Matrix Index	Key Name	Key Code	Function
(1,2).....	Up	44	Tilt move up
(2,1).....	Left	4C	Pan move to the left
(2,2).....	Home	06	Return to home position
(2,3).....	Right	40	Pan move to the right
(3,1).....	Calibrate	07	Calibrate home position
(3,2).....	Down	48	Tilt move down
(3,3).....	Privacy	0E	Tilt to privacy position.



# Technical Specifications - I/O Terminal Application

Typically used in association with programming scripts for developing applications for motion detection, event triggering, alarm notification via e-mail, and a variety of external control functions. The 4-pin I/O Terminal Block is located on the rear panel and provides the interface of a photo-coupled switch output and a photo-coupled input.

## Connector Pin Assignment

Sign	FUNCTION	SPECIFICATION
DO-	Photo-Relay OUTPUT (Normal Open)	Close circuit current max. 70 mA AC, or 100 mA DC. On-Resistance max. 30 Ohm. Open circuit blocking voltage max. 240VAC or 340VDC
DO+	Photo-Relay OUTPUT(Common)	
DI-	Photo-Relay INPUT (-)	Active High voltage 2.5~25VDC Inactive Dropout voltage 0~1.5 VDC Internal on-current has limit at 7mA to protect the photo-relay.
DI+	Photo-Relay INPUT (+)	

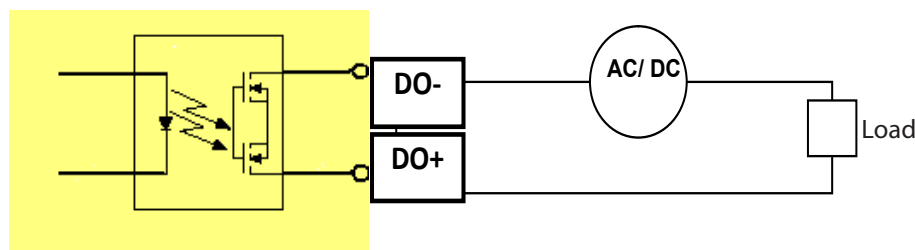
## Monitoring and Controlling

By entering http requests in your browser's URL field, you can:

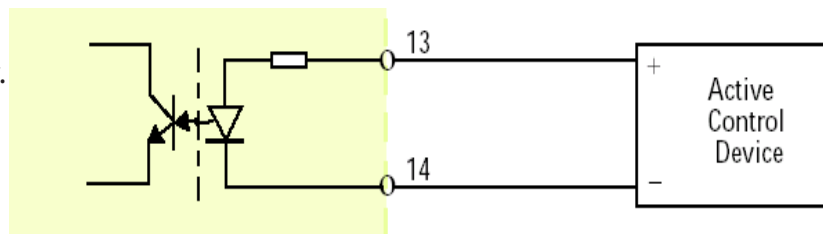
- Monitor the status of digital input.
- Drive the output switch on or off.

## Interface Schematic

Output device (load) is driven by external AC or DC power supply.



Input device (active control device) has independent power supply.



# Technical Specifications

## System Requirements

- Operating System: Windows XP/Vista/7
- Browser: Internet Explorer Version 7 above, Firefox 3.5 or above, Safari 4.0 or above, Chrome 8.0 above

## 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
- UPNP Port Forwarding
- LLTD
- PPPoE
- RTP (Real Time Protocol)
- RTCP (Real Time Control Protocol)
- RTSP (Real Time Streaming Protocol)
- 3GPP(Video only)

## LAN

- 10/100BASE-TX port
- IEEE 802.3 compliant
- IEEE 802.3u compliant
- Supports Full-Duplex operation
- MDI/MDIX auto-negotiation
- 802.3x Flow Control support for Full-Duplex mode

## Wireless Connectivity (DCS-5222L only)

- 802.11g/n Wireless with WEP/WPA/WPA2 Security
- WPS Support

## Sensor

- 1/4 inch WXGA (1280x800)

## Lens

- Focal length: • 4.57mm, F1.9

## Microphone

- Signal/noise ratio: 40dB +/- 3dB, Omni-directional

## Reset Button

- Reset to factory default

## Video Codec

- H.264/MPEG4/MJPEG triple format compression simultaneously
- JPEG for still image

## Video Features

- Adjustable image size and quality
- Time stamp and text overlay
- Flip and Mirror
- Fully configurable motion detection window

## Video Resolution

- 1280x800, 640x400, 320x192

## Audio Codec

- PCM/ADPCM

### **Light Sensitivity**

- 1 lux@F1.9

### **Digital Zoom**

- Up to 4X

### **3A Control**

- AGC (Auto Gain Control)
- AWB ( Auto White Balance)
- AES (Auto Electronic Shutter)

### **Power**

- Input: 100-240VAC, 50/60Hz
- Output: 12VDC, 1.25A
- Powered by an external power adapter
- Maximum power consumption  
DCS-5222L: 10.5W @motor on ; 8.2W @motor off  
DCS-5211L : 9W @motor on ; 6.1W @motor off

### **Dimensions (WxDxH)**

- 114.0mm x 114.0mm x 125.0mm  
(without bracket and stand)

### **Weight**

- 540g (without bracket and stand)

### **Operation Temperature**

- 0° to 40°C (32° to 104°F)

### **Storage Temperature**

- -20° to 70°C (-4° to 158°F)

### **Humidity**

- 20-80% RH non-condensing

### **Emission (EMI), Safety & Other Certifications**

- FCC Class B
- IC
- C-Tick
- CE