USER MANUAL DCS-3112

VERSION 1.00





SURVEILLANCE

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Preface

D-Link reserves the right to revise this publication and to make changes in the contents hereof without obligation to notify any person or organization of such revisions or changes.

Manual Revisions

Revision	Date	Description
1.0	June 21, 2011	DCS-3112 Revision A1 with firmware version V1.00

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Package Contents







Camera Stand



Manual and Wizard on CD-ROM







C-CS Mount Adapter (5mm Ring)

CAT5 Ethernet Cable

Power Adapter

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

Hardware Overview Rear



Front





13	1. AES: Auto Electric Shutter
	2. DC IRIS: Use an auto iris (DC drive)
	3. NTSC: TV output signal selector
24	4. PAL: TV output signal selector



Configuration with Wizard

Insert the DCS-3112 CD into your computer's CD-ROM drive to begin the installation. If the Autorun function on your computer is disabled, or if the D-Link Launcher fails to start automatically, click **Start > Run**. Type **D:\autorun.exe**, where D: represents the drive letter of your CD-ROM drive.



	InstallShield Wizard
	License Agreement Please read the following license agreement carefully.
	Press the PAGE DOWN key to see the rest of the agreement.
	D-Link Software License Agreement General Terms IMPORTANT - READ BEFORE COPYING, INSTALLING OR USING PLEASE READ THIS AGREEMENT CAREFULLY BEFORE USING THIS SOFTWARE. D-LINK SYSTEMS, INC. ("D-LINK ONESSE THE SOFTWARE TO YOU ONLY IF YOU FIRST ACCEPT THE TERMS OF THIS AGREEMENT. BY INSTALLING AND/OR USING THE SOFTWARE YOU AGREE TO THESE TERMS. IF YOU DO NOT AGREE TO THE TERMS OF THIS AGREEMENT, PROMPTLY RETURN THE LUNSED SOFTWARE TO THE PARTY (D-LINK OR ITS AUTHORIZED RESELLER) FROM Do you accept all the terms of the preceding License Agreement? If you choose No, the setup will close. To install Setup Wizard SE, you must accept this agreement.
Click Yes to accept the License Agreement.	InstallShield Yes No

InstallShield Wizard	
Choose Destination Location	
Select folder where Setup will install files.	
Setup will install Setup Wizard SE in the following folder.	
To install to this folder, click Next. To install to a different folder, click Browse and select another folder.	
Destination Folder	
C:\Program Files\D-Link\SetupWizardSE Browse	
InstallShield	
Cancel	
Cancel	

Note: The installation may take several minutes to finish.



Click on the D-Link Setup Wizard SE icon that was created in your Windows Start menu.

Start > D-Link > Setup Wizard SE

ESTsoft)-Link D-ViewCam
m Programs m ffdshow	ha in a far II
ffdshow •	riiristaii
O Documents	
Settings	
Search Google Chrome	
Help and Support ZDT	
Run Audacity	
Internet Explorer	
Shut Down O Opera	
👌 Start 🞯 😼 🕟 🧐 🔎 Windows Search	

The Setup Wizard will appear and display the MAC address and IP address of **D-Link** your camera(s). If you have a DHCP server on your network, a valid IP Address (P) SECURICAM Network will be displayed. If your network does not use a DHCP server, the network camera's default static IP address 192.168.0.20 will be displayed. MAC Address Current IP Address Device Name Click the Wizard button to continue. -Wizard Search Link About Exit **D-Link** SECURICAM Network Set up an Admin ID and Password to secure your camera. Click Next to continue. Admin ID Password Change Change New ID New Password Enter the Admin ID and password. When logging in for the first time, the default Reconfirm Reconfirm Admin ID is admin with the password left blank. Click **Next**, to proceed to the next page.

		CAM Network
	Set IP .	Address
	DHCP	
	 Static IP 	
	IP Address	192.168.1.185
	Subnet Mask	255.255.255.0
Calact DLICD if your compare obtains on ID address outomatically when it basts up	Default Gateway	192.168.1.1
Select DHCP if your camera obtains an IP address automatically when it boots up.	Primary DNS	192.168.1.1
Select static IP if the camera will use the same IP address each time it is started.	Secondary DNS	192.168.1.1
Click Next, to proceed to the next page.		Back Next Exit

	D-Link Andrey Interview Freide	ECURICAM Network
	Admin ID	admin
	Password	
	IP Address	192.168.0.102
	Subnet Mask	255.255.255.0
	Primary DNS	192.168.0.1
	Secondary DNS	192.168.0.1
		ompleted. Click on 'Back' to modify tart' to save your current settings tamera.
Take a moment to confirm your settings and click Restart.		Back Restart

Web-based Configuration Utility

This section explains how to configure your new D-Link Network Camera using the Web-based Configuration Utility.

Click on the **D-Link Setup Wizard SE** icon that was created in your Windows Start menu.

Start > D-Link > Setup Wizard SE

Select the camera and click the button labeled "**Link**" to access the web configuration.

The Setup Wizard will automatically open your web browser to the IP address of the camera.

Alternatively, you may manually open a browser and enter the IP address of the camera: **192.168.0.20**

		6	Accessories	•				_
		G	D-Link	١	6	D-ViewCam	•	
Ē	Programs		ESTsoft	•	m	Setup Wizard SE	•	D-Link Setup Wizard SE
	Documents	6	ffdshow	•]				🔄 Uninstall Setup Wizard SE
-		6	FileZilla FTP Client	•			-	
-	Search +	•	Google Chrome	•				
	Help and Support	6	ZDT	•				
~	Run		Audacity					
_		۹	Internet Explorer					
	Shut Down	0	Opera					
\rm 🕂 s	tart 🞯 🧕 闷 🕲	\mathbf{P}	Windows Search					

	MAC Address	Current IP Address	Device Name
	00.1c.f0.d3.fb.0e	192.168.1.185	DCS-3112
Wizard			
Search			
Gearch			
Link			
About			
Exit			



Enter **admin** as the default username and leave the password blank. Click **OK** to _____ continue.

This section shows your camera's live video. You can select your video profile and view or operate the camera. For additional information about web configuration, please refer to the user manual included on the CD-ROM or the D-Link website.

R		GR
and password. Warning: This ser password be sen without a secure	1000 to 1000	our username and
User name: Password:	admin <u>Remember my p</u>	▼ assword
		Cancel



Configuration

D-ViewCam Setup Wizard

D-ViewCam software is included for the administrator to manage multiple D-Link IP cameras remotely. You may use the software to configure all the advanced settings for your cameras. D-ViewCam is a comprehensive management tool for IP surveillance.

Insert the CD-ROM into the CD-ROM drive. Click "Install D-ViewCam Software" from menu, and select "D-ViewCam" to install the VMS software.



Follow the Installation Wizard to install D-ViewCam.



Click **Finish** to complete the installation.

To start D-ViewCam, select Start > All Programs > D-Link D-ViewCam >
Main Console.

For more detail operation of using D-ViewCam software, please refer to D-ViewCam Manual.

D-Link D-ViewCam - InstallShield Wizard		
	Update Complete The InstallShield Wizard has updated D-Link D-ViewCam to version 3.3.9. Yes, I want to restart my computer now. No, I will restart my computer later. Remove any disks from their drives, and then click Finish to complete setup.	
	< Back Finish Cancel	





Live Video

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

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

	Digital Input Indicator	This indicator will change color when a digital input signal is detected.	
- M	Motion Trigger Indicator	This indicator will change color when a trigger event occurs. Note: The video motion feature for your	
		camera must be enabled.	
REC	Recording Indicator	When a recording is in progress, this indicator will change color.	

- Video Profile 1
- Video Profile 2
- Video Profile 3
- Full screen mode
- Taking a Snapshot
- Recording a Video Clip
- Set a Storage Folder
- Listen/Stop Listening
- Talk/Stop Talking
- Start/Stop Digital Output





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

- **SD Status:** This option displays the status of the SD card. If no SD card has been inserted, this screen will display the message "Card Invalid."
- **IO Status:** This option displays the status of your I/O device if a device has been connected.
- **PTZ Control:** This camera uses electronic pan/tilt/zoom (ePTZ) to select and view areas of interest in the field of view. Please see page 29 for information about setting the frame size and view window area.
- ePTZ Speed: You may select a value between 0 and 64. 0 is the slowest and 64 is the fastest.
- **Global View:** This window indicates the total field of view (FOV) of the camera. The red box indicates the visible region of interest (ROI).
 - Language: You may select the interface language using this menu. The available options are English and Traditional Chinese.



↔	Auto Pan	Starts the automatic panning function. The ROI will pan from back and forth within the FOV
×	Stop	Stops the camera ePTZ motion
~	Preset Path	Starts the camera's motion along the predefined path

Setup Wizard

To configure your Network Camera, click **Internet Connection Setup Wizard**. Alternatively, you may click **Manual Internet Connection Setup** to manually configure your Network Camera and skip to page 22.

To quickly configure your Network Camera's motion detection settings, click **Motion Detection Setup Wizard**. If you want to enter your settings without running the wizard, click **Manual Motion Detection Setup** and skip to page 27.



welcome to d-link setup wizard - internet connection setup

Internet Connection Setup Wizard

This wizard will guide you through a step-by-step process to configure your new D-Link Camera and connect the camera to the internet. Click **Next** to continue.

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

Click Next to continue.

Ins wizard will guide you through a step-by-step process to configure your new D-Link Camera and connect the camera to the internet. To set-up your camera motion detection settings, please click Back button to dose this wizard and re-open the motion detection setup wizard.			
motori delectori setop viza o	 Step 2: Se Step 3: Ca Step 4: Se 	tup LAN Settings tup DDNS Settings mera Name Settings tup Time Zone Next Cancel	
Step 1: Setup LAN Settings			
connected to a router, or you are un DHCP connection. Otherwise, dick or	sure which settings to n Static IP address to r me and Password in th	net with a DHCP connection or Static IP address. If your camera is pick, D-Link recommends that you keep the default selection of nanually assign and IP address before clicking on the Next ie case that your ISP is using PPPoE and then click on the Next enrame and Password.	
	OHCP		
	C Static IP Client		
	IP address	172.17.5.113	
	Subnet mask	255.255.255.0	
	Default router	172.17.5.254	
	Primary DNS	0.0.0.0	
	Secondary DNS	168.95.1.1	
	Enable PPPoE		
	User Name		
	Password Back	(e.g. 123456@hinet.net)	

Configuration

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

Step 1: Setup LAN Settings

Please select whether your camera will connect to the Internet with a DHCP connection or Static IP address. If your camera is connected to a router, or you are unsure which settings to pick, D-Link recommends that you keep the default selection of DHCP connection. Otherwise, dick on Static IP address to manually assign and IP address before dicking on the Next button.Please enter your ISP Username and Password in the case that your ISP is using PPPoE and then click on the Next button. Please contact your ISP if you do not know your Username and Password.

O DHCP	
Static IP Client	:
IP address	172.17.5.113
Subnet mask	255.255.255.0
Default router	172.17.5.254
Primary DNS	0.0.0.0
Secondary DNS	168.95.1.1
Enable PPPoE	
User Name	
	(e.g. 123456@hinet.net)
Password	
Back	Next Cancel

Step 2: Setup DDNS Settings			
If you have a Dynamic DNS account and enter in your host information below. Plea		update your IP address automatically, enable DDNS and ton 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	

Step 3: Camera Name Settings
D-Link recommends that you rename your camera for easy accessibility. You can then identify and connect to your camera via this name. Please assign a name of your choice before dicking on the Next button.
IP Camera Name DCS-3112
Back Next Cancel

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

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

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

Configuration

Configure the correct time to ensure that all events will be triggered as scheduled. 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	(GMT-08:00) Pacific Time (US & Canada)		
Enable Daylight Saving			
	Back Next Cancel		

If you have selected DHCP, you will see a summary of your settings, including the camera's IP address. Please write down all of this information as you will need it in order to access your camera.

Click **Apply** to save your settings.

Below is a summary of your camera settings. Click on the Back button to review or modify settings or click on the Apply button if all settings are correct. It is recommended to note down these settings in order to access your camera on the network or via your web browser.			
	IP Address	DHCP	
	IP Camera Name	9 DCS-3112	
	Time Zone	(GMT+08:00) Taipei	
	DDNS	Disable	
	PPPoE	Disable	
		Back Apply Cancel	

Step 5: Setup complete

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.

welcome to d-link setup wizard - motion detection

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

Step 1: Specify Motion Detection Area Settings

Step 2: Alerts and Notifications

Back Next Cancel

Step 1

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

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

Please see the **Motion Detection** section on page 27 for information about how to configure motion detection.

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.



Back Next Cancel

Step 2

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

step 2: Motion Detection Schedule

This section allows you to specify the time and dates that your camera records motion. Please note that recorded camera footage will take up space on your hard drive. It is therefore recommended that you have sufficient disk space for Always function.

Step 3

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

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

Click Next to continue.

Step 4

You have completed the Motion Detection Wizard.

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

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

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.

O Do n	ot motify me	
Email		
	Sender email address	
	Recipient email address	
	Server address	
	User name	
	Password	
	Port	25
O FTP		
	Server address	
	Port	21
	User name	
	Password	
	Remote folder name	
		Back Next Cancel

Step 4: Setup Complete						
You have completed your camera setup. Please click the Back button if you want to review or modify your settings or click on the Apply button to save and apply your settings.						
	Enable					
	EVENT :	Video Clip				
	Schedule Day :	Sun ,Mon ,Tue ,Wed ,Thu ,Fri ,Sat ,				
	Schedule Time :	Always				
	Alerts and Notification :	Email				
		Back Apply Cancel				

Step 4: Setup Complete						
You have completed your camera setup. Please dick the Back button if you want to review or modify your settings or dick on the Apply button to save and apply your settings. Changes saved.IP Camera's network is restarting, please wait for 3 seconds						
Back Apply Cancel						

Network Setup

Use this section to configure the network connections for your camera. All relevant information must be entered accurately.

LAN Settings: Settings for your local area network.

- **DHCP:** Select this connection if you have a DHCP server running on your network and would like your camera to obtain an IP address automatically.
- Static IP Address: You may obtain a static or fixed IP address and other network information from your network administrator for your camera. A static IP address may simplify access to your camera in the future.
 - IP Address: Enter the fixed IP address in this field.
 - Subnet Mask: This number is used to determine if the destination is in the same subnet. The default value is 255.255.255.0.
- Default Gateway: The gateway used to forward frames to destinations in a different subnet. Invalid gateway settings may cause the failure of transmissions to a different subnet.
 - Primary DNS: The primary domain name server translates names to IP addresses.

N T fauld	
D-Link	
S-3112 // LIVE VIDEO SETUP ADVANCED MAINTENANCE STATUS	HELP
p Waard NETWORK SETUP	Helpful Hints Select DHCP
Voork Setup You can configure your LAN and Internet settings here. and CDG Save Settings Don't Save Settings and Settings Don't Save Settings Save Settings and the settings LAN SETTINGS Save Settings	Connector Unity Connection if you are running a DHCP server on your network and would like an IP address assigned to your camera automatically.
or Detection G DHCP Static IP Cont Subnet mask 25:355:350 Default route I72:17:5:113 Sobnet mask 25:355:350 Default route I72:17:5:234 Primy DIS <u>D0:00 Secondary DNS Secondary DNS Enable UP/P port forwarding Forwarding Port Forwarding B active PPPE SETTINGS C Enable @ Diable UP:P Forwarding B active </u>	- Enables (Livie) settings - Enables (Livie) settings - Enables (Livie) - Enables - E
Password Confirm password PPPoE Status HTTP	HTTPS Port in a camera connects it with a PC via a secure web browser. IRTSP Port is the port you alocate in order to connect to a camera by using streaming mobile device(s), such as a mobile phone or PDA.
HTTP port 60 Access name for stream1 index impg Access name for stream2 index impg Access name for stream3 index impg	Traffic - Specifying the maximum download/ upload bandwith for each socket is useful when connecting your device to a busy or heavily loaded network.
HTTPS HTTPS port RTSP port Access name for stream1 Access name for stream3 Invasion ItRAFFIC Maximum Dupicad Bandwidth: PixeX kbb Bytes Per Second Hazarum Downlade Bandwidth: PixeX kbb Bytes Per Second	 The value of means it will not monitor any traffic.
Security	

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

Enable UPnP: Enabling this setting allows your camera to be configured as a UPnP device on your network.

Enable UPnP Port Enabling this setting allows the camera to add port forwarding entries into the router automatically on Forwarding: a UPnP capable network.

Configuration

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

- User Name: The unique name of your account. You may obtain this information from your ISP.
- **Password:** The password to your account. You may obtain this information from your ISP.

HTTP Port: The default port number is 80.

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

- HTTPS Port: You may use a PC with a secure browser to connect to the HTTPS port of the camera. The default port number is 443.
 - **RTSP Port:** The port number that you use for RTSP streaming to mobile devices, such as mobile phones or PDAs. The default port number is 554. You may specify the address of a particular stream. For instance, live1.sdp can be accessed at rtsp://x.x.x.x/video1.sdp where the x.x.x.x represents the ip address of your camera.

Maximum Upload/Download Bandwidth: bandwidth for each socket can be useful when connecting your device to a busy or heavily loaded network. Entering a value of '0' indicates that the camera should not monitor bandwidth. Specifying other values will limit the camera's transfer speed to the specified number of Kilobytes per second.



Dynamic DNS

DDNS (Dynamic Domain Name Server) will hold a DNS host name and synchronize the public IP address of the modem when it has been modified. A user name and password are required when using the DDNS service.

- Enable DDNS: Select this checkbox to enable the DDNS function.
- Server Address: Select your Dynamic DNS provider from the pull down menu or enter the server address manually.
 - Host Name: Enter the host name of the DDNS server.
 - User Name: Enter your user name or e-mail used to connect to the DDNS.
 - Password: Enter your password used to connect to the DDNS server.
 - Timeout: Enter DNS Timeout values.
 - Status: Indicates the connection status, which is automatically determined by the system.

112	LIVE VIDEO	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP		
zard	DYNAMIC DNS					Helpful Hints		
letup		The Dynamic DNS feature allows you to use a domain name that you have purchased						
C 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 addresse. By using a DDNS drosses.							
tup		service, you can enter your domain name to connect to your camera no matter what your IP address periodically						
d Video		website domain name t						
etection	JAN UP THE PRINCE	connecting through						
Date		Save Settings	Don't Save Se	ettings				
tup	DYNAMIC DNS S	ETTING						
	Enable DDNS							
	Server Address	www.dlinkddns.co	m <	www.dlinkddns.com	w.			
	Host Name							
	User Name							
	Password							
	Verify Password							
	Timeout	24	(h	ours)				
	Status	none						

Image Setup

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

Enable Privacy The Privacy Mask setting allows you to specify upto 3 rectangular areas on the camera's image to beblocked/excluded from recordings and snapshots.

You may click and drag the mouse cursor over thecamera image to draw a mask area.Right clicking on the camera image brings up thefollowing menu options: **Disable All:** Disables all mask areas **Enable All:** Enables all mask areas **Reset All:** Clears all mask areas.

- Mirror: Mirrors the images.
 - Flip: Rotates the image 180 degrees.
- White Balance: If this option is enabled, white objects will be rendered as white on the screen.
- **Exposure Mode:** Changes the exposure mode. Use the dropdown box to set the camera for Indoor, Outdoor, or Night environments, or to capture Moving objects. The Low_Noise option will focus on creating a high-quality picture without noise. You can also create 3 different custom exposure modes. The Max Gain setting will allow you to control the maximum amount of gain to apply to brighten the picture.
 - **Denoise:** This setting controls the amount of noise reduction that will be applied to the picture.
 - **Brightness:** Adjust this setting to compensate for backlit subjects.
 - **Contrast:** Adjust this setting to alter the color intensity/strength.
 - Saturation: This setting controls the amount of coloration, from grayscale to fully saturated.
 - Sharpness: Specify a value from 0 to 8 for image edge enhancement.
 - **Reset Default:** Click this button to reset the image to factory default settings.

 Description

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Audio and Video

You may configure up to 3 video profiles with different settings for your camera. Hence, you may set up different profiles for your computer and mobile display. In addition, you may also configure the two-way audio settings for your camera.

Number of active profiles: You can use the dropdown box to set up to 3 active profiles.

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

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

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

- 16:9 1280x720, 800x450, 640x360, 480x270, 320x176, 176x144
- 4:3 1280x1024, 1280x960, 1024x768, 800x600, 640x480, 480x 360, 320x240, 176x144



- Maximum frame rate: A higher frame rate provides smoother motion for videos. Lower frame rates will result in stuttering motion. The maximum number of frames that is displayed in 1 second. 30 fps 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" option to optimize the bandwidth utilization and video quality. If fixed bandwidth utilization is desired regardless of the video quality, choose "Constant bit rate" and select the desired bandwidth.
 - **Constant bit rate:** The bps will affect the bit rate of the video recorded by the camera. Higher bit rates result in higher video quality.
 - **Fixed quality:** Select the image quality level for the camera to try to maintain. High quality levels will result in increased bit rates.

Configuration

Audio in off: Ticking this checkbox will mute incoming audio.

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

Audio out off: Ticking this checkbox will mute outgoing audio.

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



Motion Detection

Enabling Video Motion will allow your camera to use the motion detection feature. You may draw a finite motion area that will be used for monitoring.

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

- Sensitivity: Specifies the measurable difference between two sequential images that would indicate motion. Please enter a value between 0 and 100.
- **Percentage:** Specifies the amount of motion in the window being monitored that is required to initiate an alert. If this is set to 100%, motion is detected within the whole window will trigger a snapshot.



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

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

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

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

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

Restore: Restores the previously specified motion detection areas.



Time and Date

This section allows you to automatically or manually configure, update, and maintain the internal system clock for your camera.

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

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

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

Set Date and Time Manually: Selecting this option allows you to configure the Daylight Saving date and time manually.

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

Synchronize with NTP Server: Enable this feature to obtain time automatically from an NTP server.

NTP Server: Network Time Protocol (NTP) synchronizes the DCS-3112 with an Internet time server. Choose the one that is closest to your location.

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

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



Event Setup

The Event Setup page includes 4 different sections.

- Event
- Server
- Media
- Recording

1. To add a new item - "event, server or media," click **Add**. A screen will appear and allow you to update the fields accordingly.

2. To delete the selected item from the pull-down menu of event, server or media, click **Delete**.

3. Click on the item name to pop up a window for modifying.

Note: You can add up to four events, five servers, and five media fields.

D-Lin	C					
DCS-3112	LIVE VIDEO	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Setup Wizard	SERVER					Helpful Hints
Network Setup	You can set at m	ost 5 different serve	rs here for different e	vent.		" Server name " The unique name for server.
Dynamic DNS		Test Save	Settings Don't Sa	ve Settings		There are four kinds of servers supported. They
Image Setup					ā	are email server, FTP server, HTTP server and
Audio and Video	SERVER TYPE					network storage.
Motion Detection	Server Name:					Email server: "Sender email
Time and Date	• Email				a	address" The email address of the sender.
Event Setup	Send	ler email address				"Recipient email address" The email address of the recipient.
SD Card	Recip	oient email address				
Logout	Serve	er address				FTP server: "Remote folder
	User	name				name" Granted folder on the external FTP
	Passv	word			0	server. The string must conform to that of the
	Port		25		5	external FTP server. Some FTP servers cannot
	O FTP				s	accept preceding slash symbol before the path
		er address			r	without virtual path mapping. Refer to the
	Port		21		6	nstructions for the external FTP server for
		name			r	details. The folder privilege must be open
	Passv					for upload. " Passive Mode" Check
		ote folder name				t to enable passive mode n transmission.
	Passiye mode					Network storage: Only
	O Network sto	-			s	one network storage is supported.
		vork storage location example:\\my_nas\di	1			"Network storage location" The path to
		coroup				upload the media. " Workgroup" The workgroup for network
	User	name				storage.
	Passv	word				5D card: Jse the SD card for
	Prima	ary WINS server				ecording media.
	C SD Card					
		Test Save :	Settings Don't Sa	ve Settings		

Application

In a typical application, when motion is detected, the DCS-3112 Network Camera sends images to a FTP server or via e-mail as notifications. As shown in the illustration below, an event can be triggered by many sources, such as motion detection or external digital input devices. When an event is triggered, a specified action will be performed. You can configure the Network Camera to send snapshots or videos to your e-mail address or FTP site.



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

Add Server

Configure up to 5 servers to store media.

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.

D-Lini	Č						
DCS-3112	LIVE VIDEO	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP	
etup Wizard	SERVER				н	elpful Hints	
letwork Setup		ost 5 different serve	rs here for different ev	ent.		Server name" The ique name for server.	
ynamic DNS		Test Save S	Settings Don't Sa	ve Settings	Th	ere are four kinds of rvers supported. They	
mage Setup			Doint da	re octarigo	ar	e email server, FTP rver, HTTP server and	
udio and Video	SERVER TYPE					twork storage.	
lotion Detection	Server Name:	erver1				mail server: Sender email	
ime and Date	• Email				a	dress" The email dress of the sender.	
Event Setup D Card	Send	er email address				Recipient email dress" The email	
ogout	Recip	ient email address				dress of the recipient.	
	Serve	er address				IP server: Remote folder	
	User	name			n	ame" Granted folder	
	Passv	vord			se	the external FTP rver. The string must	
	Port		25		e	nform to that of the ternal FTP server.	
	O FTP				a	me FTP servers cannot cept preceding slash	
	Serve	er address			w	mbol before the path thout virtual path	
	Port		21		in	apping. Refer to the structions for the	
	User	name			de	ternal FTP server for tails. The folder	
	Passv	vord			fo	ivilege must be open r upload.	
	Remo	ote folder name			it	assive Mode" Check to enable passive mode	
		Passlye mode				in transmission.	
	C Network sto	rage			or	etwork storage: Only ie network storage is	
	Netw	ork storage location			"	supported. "Network storage	
	(for e	example:\\my_nas\dis	sk\folder)		u	cation" The path to load the media.	
	Work	group			w	Vorkgroup" The orkgroup for network	
	User	name				orage.	
	Passv	vord			U	D card: se the SD card for	
	Prima	ary WINS server			re	cording media.	
	C SD Card						

Add Media

There are three types of media, Snapshot, Video Clip and System Log.

Media Name: Enter an unique name for media.

Snapshot: Select this option to enable snapshots.

Source: The stream source: Profile 1, Profile 2 or Profile 3.

Send pre-event The number of pre-event images. image(s) [0~4]:

- Send post-event The number of post-event images.
 image(s) [0~7]:
- File name prefix: The prefix name will be added on the file name.

Video clip: Select this option to enable video clips.

- **Source:** The source of the profile: **profile1**, **profile2**, or **profile3**.
- Pre-event recording: The interval of pre-event recording in seconds.
- Maximum duration: The maximal recording file duration in seconds.

Maximum file size: The maximal file size would be generated.

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

System log: Select this option to save events to the camera system log.



Add date and time Check it to add timing information as file name suffix. suffix to file name:
Send post-event image (s) [0~7)

Specify to capture the number of images after a trigger is activated. A maximum of seven images can be generated.

For example:

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



Add a date and time suffix to the file name

Select this option to add a date and time to the file name suffix.



Maximum duration

Specify the maximal recording duration in seconds. You can set up to ten seconds.

For example:

Configuration

If the Pre-event recording is set to five seconds and the Maximum duration is set to ten seconds, the Network Camera continues to record for another four seconds after a trigger is activated.



File name prefix

Enter the text that will be added at the beginning of the file name.



Add Event

Create and schedule up to 3 events with their own settings here.

Event name: Enter a name for the event.

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

- **Priority:** Set the priority for this event. The event with higher priority will be executed first.
 - **Delay:** Select the delay time before checking the next event. It is being used for both events of motion detection and digital input trigger.
- Trigger: Specify the input type that triggers the event.
- Video Motion Motion is detected during live video monitoring. Select the **Detection:** windows that need to be monitored.
 - **Periodic:** The event is triggered in specified intervals. The trigger interval unit is in minutes.
- Digital input: The external trigger input to the camera.
- System Boot: Triggers an event when the system boots up.
- Network Lost: Triggers an event when if the network connection is lost.
 - Time: Select Always or enter the time interval.
 - **Trigger D/O:** Select to trigger the digital output for a specific number of seconds when an event occurs.
 - Server: Specify the location where the event information should be saved to.



Add Recording

Here you can configure and schedule the recording settings.

Recording entry The unique name of the entry. name:

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

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

Source: The source of the stream.

Recording Scheduling the recording entry. **schedule:**

Recording Configuring the setting for the recording. **settings:**



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

Total cycling Please input a HDD volume between 1MB and 200GB for recording space. The recording data will replace the **recording size**: oldest record when the total recording size exceeds this value. For example, if each recording file is 6MB, and the total cyclic recording size is 600MB, then the camera will record 100 files in the specified location (folder) and then will delete the oldest file and create new file for cyclic recording.

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

Size of each file File size for each recording file. You may input the value in the range of 200-5000. **for recording:**

File Name Prefix: The prefix name will be added on the file name of the recording file(s).

SD Card

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

Format SD Card: Click this icon to automatically format the SD card and create "picture" & "video" folders.

View Recorded Picture: If the picture files are stored on the SD card, click on the picture folder and choose the picture file you would like to view.

Playback Recorded Video: If video files are stored on the SD card, click on the video folder and choose the video file you would like to view.

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



Advanced

Digital Input/Output

This screen allows you to control the behavior of digital input and digital output devices. The I/O connector provides the physical interface for digital output (DO) and digital input (DI) that is used for connecting a diversity of external alarm devices such as IR-Sensors and alarm relays. The digital input is used for connecting external alarm devices and once triggered images will be taken and e-mailed.

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

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

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



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

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



RS-485

You may configure the RS-485 settings or communication specifications (baud rate, data bit, stop bit, and parity bit) for your camera. RS-485 is a serial communication method for computers and devices. RS-485 is used to control a PAN/TILT apparatus, such as an external camera enclosure.

- SupportWhen Support PAN-TILT is enabled, a control panelPAN-TILT:will be displayed on the Live Video page allowing control
through RS-485 for an external camera enclosure.
- Protocol: Select one protocol type from the pull-down menu.
 - **ID:** This ID is the identifier for RS-485 devices. IDs range from 1 to 255.
- **Baud Rate:** Baud Rate is a speed measurement for communication between a transmitter and receiver which indicates the number of bit transfers per second. A higher baud rate will reduce the distance of the two devices (transmitter and receiver). Values range from 2400 (default) to 19200 bps.
 - **Data Bit:** This value is the number of data bits in a transmission. The data bit can be 7 or 8 (default).
- **Parity Bit:** Parity is a form of error checking used in serial communication. For even and odd parities, the serial port sets the parity bit (the last bit after the data bits) to a value to ensure that the transmission has an even or odd number of logic-high bits. For example, if the data is 011, for even parity, the parity bit is 0 to keep the number of logic-high bits even. If the parity is odd, the parity bit is 1, resulting in 3 logic-high bits. Parity can be set to **No** (none), **Even**, and **Odd**.
- Stop Bit: The stop bit is used to signal the end of communication for a single packet. The more bits used for stop bits, the greater the lenience in synchronizing the different clocks but the slower the data transmission rate. The stop bit can be set to 1 or 2. The default value is 1.





ICR

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

- Automatic: The Day/Night mode is set automatically. Generally, the camera uses Day mode and switches to Night mode when needed.
- Day Mode: Day mode enables the IR Cut Filter.
- Night Mode: Night mode disables the IR Cut Filter.
- Schedule Mode: Set up the Day/Night mode using a schedule. The camera will enter Day mode at the starting time and return to Night mode at the ending time.
- DC Power Output: The DC 12V Power Output port can supply 12V DC, 200mA of power to another device (such as a spotlight or infrared lamp). Its default setting is Off, meaning it will not supply power. You can select On to turn on the power supply. If you choose Sync With ICR, the power output will be enabled whenever the IR Cut Filter is active. Alternatively, you can select Schedule and manually specify when the power should be enabled.





HTTPS

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

Enable HTTPS Secure Enable the HTTPS service. Connection:

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

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

Status: Displays the status of the certificate.

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



Access List

Here you can set access permissions for users to view your DCS-3112.

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

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

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

- End IP address: The ending IP Address of the devices (such as a computer) that have permission to access the video of the camera.
- Delete allow list: Remove the customized setting from the Allow List.

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

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

For example:

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





Maintenance

Device Management

You may modify the name and administrator's password of your camera, as well as add and manage the user accounts for accessing the camera. You may also use this section to create the unique name and configure the OSD setting for your camera.

Admin Password Setting: Set a new password for the administrator's account.

Add User Account: Add new user account.

User Name: The user name for the new account.

Password: The password for the new account.

- User List: All the existing user accounts will be displayed here. You may delete accounts includes in the list, but please reserve at least one as guest.
- **Camera Name:** Create a unique name for your camera that will be added to the file name prefix when creating a snapshot or a video clip.
 - Enable OSD: Select this option to enable the On-Screen Display feature for your camera.

Label: Enter a label for the camera.



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

Backup and Restore

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

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

- Local From Local Hard Drive: Locate a pre-saved configuration by clicking Browse and then restore the pre-defined settings to your camera by clicking Load Configuration.
 - Restore to Factory Default: You may reset your camera and restore the factory settings by clicking Restore Factory Defaults.

Reboot Device: This will restart your camera.



Firmware Upgrade

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

To upgrade the firmware on your DCS-3112, please download and save the latest firmware version from the D-Link Support Page to your local hard drive. Locate the file on your local hard drive by clicking the **Browse** button. Select the file and click the **Upload** button to start upgrading the firmware.

Current Firmware Version: Displays the detected firmware version.

Current Product Name: Displays the camera model name.

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

Upload: Uploads the new firmware to your camera.



Status

Device Info

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



Logs

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

CS-3112	LIVE VIDEO	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP				
vice Info	SYSTEM LOG					Helpful Hints				
og	The system log re	The system log records camera events that have occurred.								
jout						your local hard drive b clicking the Download				
	CURRENT LOG					button, and you can d the log by clicking on t Clear button.				
	1. 2009-10-19 17	7:50:54 MOTION OC	CURRED		(
	2. 2009-10-19 17	7:50:53 MOTION OC	CURRED							
	3. 2009-10-19 17	7:50:50 MOTION OC	CURRED							
	4. 2009-10-19 17	7:50:49 MOTION OC	CURRED							
	5. 2009-10-19 17									
		7:50:47 MOTION OC								
		7:50:46 MOTION OC								
		7:50:45 MOTION OC								
	9. 2009-10-19 1									
		17:50:38 MOTION O								
		17:50:37 MOTION O 17:50:36 MOTION O								
		17:50:36 MOTION O								
	14. 2009-10-19									
		15. 2009-10-19 17:50:31 MOTION OCCURRED 16. 2009-10-19 17:50:30 MOTION OCCURRED								
		17:50:29 MOTION O								
		17:50:28 MOTION O								
		17:50:27 MOTION O								
	20, 2009-10-19									

Help

This page provides helpful information regarding camera operation.



DI/DO Schematics

DI/DO



Technical Specifications

Camera	Camera Hardware Profile	 Sony Exmor 1/4" 1.3 Megapixel progressive CMOS sensor Minimum illumination: 0.4 lux (Color); 0.04 lux (B/W) Built-in Infrared-Cut Removable (ICR) Filter module 10X digital zoom 	 DC iris varifocal length: 3.5 mm to 8 mm Aperture: F1.4 Angle of view: (H) 35.4° to 77.6° (V) 26.6° to 57.6° (D) 44.3° to 97.9° 	
	Image Features	 Configurable image size, quality, frame rate, and bit rate Time stamp and text overlays Configurable motion detection windows 	 3 configurable privacy mask zones Configurable white balance, shutter speed, brightness, saturation, contrast, and sharpness 	
	Video Compression	 H.264/MPEG-4/MJPEG simultaneous format compression JPEG for still images 	 H.264/MPEG-4 multicast streaming 	
	Video Resolution	 16:9 - 1280 x 720, 800 x 450, 640 x 360, 480 x 270, 320 x 176, 176 x 144 4:3 - 1280 x 1024, 1280 x 960, 1024 x 768, 800 x 600, 640 x 480, 480 x 360, 320 x 240, 176 x 144 All resolutions support frame rates of up to 30 fps 		
	Audio Support	= G.726		
	External Device Interface	 2 DI / 1 DO interface 12 V DC, 200 mA Output RS-485 	 SD card Audio input / output Video output 	
Network	Network Protocols	IPv4, TCP/IP, UDP, ICMP, DHCP Client, NTP Client (D-Link), DNS Client, DDNS Client (D-Link), SMTP Client, FTP Client, HTTP/HTTPS, Samba Client, PPPoE, UPnP Port Forwarding, RTP/RTSP/RTCP, IP filtering, 3GPP, IGMP, ONVIF compliant		
	Security	 Administrator and user group protection Password authentication 	 HTTP and RTSP digest encryption 	

Appendix

System Management	System Requirements for Web Interface	 Operating System: Microsoft Windows 7/Vista/XP/2000 Browser: Internet Explorer, Firefox, Netscape, Opera 					
	Event Management	 Motion detection Event notification and upload of snapshots/video clips via HTTP, SMTP, or FTP SMTP, or FTP Supports multiple HTTP, SMTP, and FTP servers Multiple event notifications Multiple recording methods for easy backup 					
	Remote Management	 Configuration accessible via web browser Take snapshots/video clips and save to local hard drive or NAS via web browser 					
	Mobile Support	Windows 7/Vista/XP system, Pocket PC, or mobile phone with 3GPP playback support					
	D-ViewCam™ System Requirements	 Operating System: Microsoft Windows 7/Vista/XP Protocol: Standard TCP/IP Web Browser: Internet Explorer 6 or higher 					
	D-ViewCam™ Software Functions	 Remote management/control of up to 32 cameras Viewing of up to 32 cameras on one screen Scheduled motion-triggered or manual recording options 					
General	Power Input	12 V DC 1.25 A, 50/60 Hz, 802.3af PoE					
	Max. Power Consumption	3.6 watts					
	Operating Temperature	0 to 40 °C (32 to 104 °F)					
	Storage Temperature	-20 to 70 °C (-4 to 158 °F)					
	Humidity	20% to 80% non-condensing					
	Weight	560 g					
	Certifications	CE (Class A), LVD, FCC (Class A), ICES-003, C-Tick					
Dimensions							