Version 2.10 | 25/10/2018





# **User Manual**

# Vigilance Full HD H.265 Outdoor Bullet Camera

DCS-4701E

# Preface

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

# **Manual Revisions**

Revision	Date	Description
2.00	14/05/2018	Version B1 with firmware version 2.00
2.10	25/10/2018	Minor updates

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# **Product Overview Package Contents**



DCS-4701E Vigilance Full HD H.265 Outdoor Bullet Camera

Cable Waterproofing Connector

**Rubber Power Connector Plug** 

**Mounting Kit** 

CD-ROM with User Manual and software

**Quick Installation Guide** 

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

Safety Notice: Installation and servicing should be done by certified technicians to conform with all local codes and prevent voiding your warranty.

## Introduction

The DCS-4701E Vigilance Full HD H.265 Outdoor Bullet Camera is a professional surveillance and security solution for small, medium, and large enterprises. It uses a full-HD progressive scan CMOS sensor to deliver low-noise video and low-light capability ideal for surveillance applications. The DCS-4701E offers a complete surveillance solution featuring a built-in IR cut filter and IR LEDs effective up to 30 meters with built-in smart IR function, avoiding overexposure of near objects at night, allowing it to stream simultaneous real-time full-HD resolution video 24/7. In addition, the IP66-certified weatherproof housing make the DCS-4701E ideal for both indoor and outdoor applications.

The DCS-4701E streams video with H.265 compression which has lower a bandwidth requirement compared to H.264 while also saving storage capacity of NVR/VMS. The DCS-4701E also incorporates Power over Ethernet (PoE), allowing it to be easily installed in a variety of locations especially with D-Link Surveillance Switches which supports ONVIF and surveillance VLAN, bandwidth control, and cable diagnostics functions.

The DCS-4701E can be accessed remotely, controlled, and configured from any computer over your local network or through the Internet via a web browser. The simple installation and intuitive web-based interface offer easy configuration across the full range of its advanced feature set and make it an ideal choice for a dependable and cost-effective surveillance solution with easy clutter-free installation.

## **System Requirements**

- Computer with Microsoft Windows<sup>®</sup> 10, 8, or 7, Mac OSX 10.9 or above
- Internet Explorer 9 or higher for Windows<sup>®</sup>, Firefox 2-51, 52 ESR, Chrome 42 or higher, or Safari 9 or higher for MacOS X
- Existing 10/100 Ethernet-based network with an available 802.3af Power over Ethernet (PoE) port

## **Features**

#### **H.265** Compression

The DCS-4701E supports the latest H.265 compression algorithm to bring out the best combination of performance, quality, bandwidth, and storage space.

#### **Simple to Maintain**

The DCS-4701E is a stand-alone system with a built-in CPU, requiring no special hardware or software. The DCS-4701E can be viewed and managed through most web browsers, including Internet Explorer<sup>®</sup>, Chrome<sup>®</sup>, Firefox<sup>®</sup>, and Safari<sup>®</sup>.

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

With support for TCP/IP networking, HTTP/HTTPS, and other Internet-related protocols, the DCS-4701E can also be integrated easily into other Internet/Intranet applications because of its standards-based features. The DCS-4701E works in any network that supports 10/100 Ethernet, making the DCS-4701E easy to integrate into your existing network environment.

#### **Advanced Event Management**

The DCS-4701E can be set up to send e-mail notifications with snapshots when an event occurs, such as when motion is detected. Events can be triggered from several sources, such as motion detection and time-based events.

#### **IR LEDs for Day and Night Functionality**

The built-in infrared LEDs enable night time viewing of up to 30 meters. With built-in smart IR function, it can avoid overexposure of near objects at night.

#### IP66 Weatherproof and Vandal-proof Housing

The DCS-4701E uses an IP66 weatherproof housing, allowing you to rest assured that in the toughest of conditions, it will continue to provide round-the-clock surveillance.

#### PoE (Power over Ethernet) for Flexible Installation

The DCS-4701E can draw all the power it needs from a PoE switch or PoE injector for a simple and clutter-free installation.

#### **Remote Monitoring Utility**

The D-Link D-ViewCam<sup>™</sup> application adds enhanced features and functionality for the camera and allows administrators to configure and access the camera from a separate site via Intranet or Internet. Other features include image monitoring, recording images to a hard drive, viewing up to 32 cameras on one screen, and taking snapshots.

## **Hardware Overview**



1	IR LEDs Provide illumination for low-light environments.	
2	Camera Lens	Camera lens to record video of the surrounding area.
<b>3</b> Adjustment Ring Loosen to adjust and tighten to lock the camera angle.		Loosen to adjust and tighten to lock the camera angle.
4	Ethernet Port	RJ-45 connector for Ethernet which can also be used to power the camera using Power over Ethernet (PoE).
5	Power Port	Connects to an optional 12 V / 1.5 A power adapter (not included).

## **Hardware Overview**



1	Grounding Screw	Used to connect the camera to ground.
2	<b>Reset Button</b>	Press and hold this button down for 10 seconds to reset the camera to factory default settings.

# Installation **Mounting the Camera**

It is highly recommended that you configure and test your camera before mounting it. Refer to "Software Installation" on page 14 for more information.

#### Step 1

Place the mounting sticker where you want to position the camera.

Use a 6 mm drill bit to make the required holes approximately 25 mm deep, then insert the wall anchors into the holes.

Step 2 If you are running the camera cables through the wall, drill a hole in the center and pull the cables through the hole.

Step 3 Use the screws provided to mount the camera to the wall.

If you are running the camera cables out the side of the camera, guide the camera cables through the cable channel on the base.







## Step 5

Connect the power and Ethernet cables, or just the Ethernet cable if you are using a PoE connection.

## Step 6

To adjust the camera's angle, turn the adjustment ring counterclockwise to loosen it, then move the camera to the desired position and angle. When you are finished, turn the adjustment ring clockwise to tighten it.







# **Waterproofing Your Installation**

Round Ethernet cable, a crimping tool, and RJ-45 plugs are required for this procedure.

## Step 1

Place the washer around the base of the Ethernet connector as shown.

#### Step 2

Thread bare Ethernet cable through the waterproof connector as shown, then crimp an RJ-45 plug onto the cable.

#### Step 3

Crimp an RJ-45 connector onto the end of the cable.

Step 4

Connect the other end of the Ethernet cable to the camera's Ethernet port.



Section 2: Installation

#### Step 5

Connect the RJ-45 plug into the Ethernet connector, then screw the waterproof connector to the Ethernet connector by turning it about a half-turn clockwise.

If you are using PoE to power your camera, use the power connector cap to seal the power connector.

Step 6 Screw the back part of the waterproof connector clockwise until there is a tight seal around the Ethernet cable.







## **Software Installation**

#### Step 1

Insert the DCS-4701E 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 the Start button and type **D:\autorun.exe** (where D: represents the drive letter of your CD-ROM drive) and press **Enter**.



## Step 2 Click on the D-Link Setup Wizard SE icon that was created in your Windows Start menu (Start > D-Link > Setup Wizard SE).

		Accessories	۲				
	m	D-Link	۲	6	D-ViewCam	•	
Programe		ESTsoft	۲	â	Setup Wizard SE		🚺 D-Link Setup Wizard SE
Documents	6	ffdshow	٢				Uninstall Setup Wizard SE
Settings	6	FileZilla FTP Client	۲				
Search		Google Chrome	۲				
Help and Support	6	ZDT	۲				
Run		Audacity					
	۲	Internet Explorer					
Shut Down	0	Opera					
🍠 Start 🔞 🧕 🕞 🕲	P	Windows Search					

#### Step 3

The Setup Wizard will appear and display the MAC address and IP address of your camera(s). If you have a DHCP server on your network, a valid IP Address will be displayed. If your network does not use a DHCP server, the network camera's default static IP **192.168.0.20** will be displayed.

Select your camera, then click the **Wizard** button to continue.

## Step 4

Enter the Admin ID and password. When logging in for the first time, the default Admin ID is **admin** with the password left blank.

Click the checkboxes if you wish to change the admin ID and password for the camera, and enter the new ID and password you wish to use.

Click **Next** to continue.



**D-Link** 



#### Step 5

Select **DHCP** if your camera obtains an IP address automatically from a DHCP server such as a router. Select **Static IP** if you want to manually enter the IP settings for the camera.

Click **Next** to continue.



#### Step 6

Take a moment to confirm your settings and click **Restart**.

Admin ID	admin
Password	*****
IP Address	Auto
Subnet Mask	Auto
Default Gateway	Auto
Primary DNS	Auto
Secondary DNS	Auto
Now you have configured 'Restart' to commit the se and reboot it. Or, you can the settings again.	all settings. Please click button titings to the Internet camera o click button 'Back' to change

# Configuration **Using the Configuration Interface**

After completing the Camera Installation Wizard, you are ready to use your camera. The camera's built-in Web configuration utility is designed to allow you to easily access and configure your DCS-4701E. At the end of the wizard, click Link, or enter the IP address of your camera into a web browser, such as Firefox. To log in, use the User name **admin** and the password you created in the Installation Wizard. If you did not create a password, the default password is blank. After entering your password, click **OK**.

#### Step 1

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

## Step 2

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

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



D-ViewCam

🖮 Setup Wizard SE 🔸 Ď D-Link Si

Uninstall Setup Wizard SE

Accessorie 🛅 D-Link

ESTsof

ffdshow

FileZilla FTP Client

Google Chrome

Document

Search Link About Exit

Settings

## Step 3

The first time you connect to the camera, you will be asked to set a password for the administrator account. After entering a password, click **Save**.

OR

Under Password, enter the same password configured during setup and click **Login** to continue.

# Windows Security The server 192.168.0.101 at DCS-4701E requires a username and password. Warning: This server is requesting that your username and password be sent in an insecure manner (basic authentication without a secure connection). User name Password Remember my credentials OK Cancel

## Step 4

This section displays your camera's live video. You can select your video profile and view or operate the camera.



## **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.

If your view window area is less than your frame size, you can click and drag on the live video to move the camera view around. Refer to "Video Stream" on page 37.

**Note**: If a system error message appears when clicking the snap or record buttons, you may need to (re)install the **Microsoft Visual C++ 2010 Redistributable Package (x86)** found on the included CD or download it from the Microsoft support site.

\$	Setup	Clicking this will take you to the camera configuration pages.	
Ð	Edit Toolbar	Clicking this will allow you to add and remove icons from the toolbar. This lets you create a custom toolbar with only the options you want.	
À	Window Size	<ul> <li>You can choose between various screen sizes for your camera's video:</li> <li>Auto Screen: Automatically resize the camera video to match your browser window</li> <li>Full Screen: View your camera video using the entire screen</li> <li>100% Screen: View your camera's video at 100% size</li> <li>50% Screen: View your camera's video at 50% size</li> <li>25% Screen: View your camera's video at 25% size</li> </ul>	
1	Video Profile 1/2	Select a video profile to use. For more on setting up your video profiles, refer to <b>"Video Stream" on page 37</b> .	
6	Take a Snapshot	This will save a snapshot to your PC using the storage folder you have selected.	
C)	Record a Video Clip	This will start recording a video clip to your PC using the storage folder you have selected. Click it again to stop recording. If you close the browser window, the recording will stop.	





6	Set a Storage Folder	Select a storage folder to save snapshots and video clips to.
Q	Zoom In/Out	Click this and use the slider to zoom in and out of your camera's video.

You can find these icons in the top-right corner of the Live Video screen:

	Alarm	This will flash red when motion is detected.
$\bigcirc$	Record Status	This will turn red when the camera is recording.
?	Help	Click this to open a window that describes the Live Video controls.
0	Logout	Click this to log out of the web interface.

## **Setup Wizard**

This page lets your use setup wizards to walk you through setting up your camera's network and motion detection settings.

Network Setup Click on this button to start the Network Setup Wizard. Refer to "Network Wizard: Setup Wizard" on page 22.

MotionClick on this button to start the Motion Detection Setup Wizard. Refer toDetection"Motion Detection Setup Wizard" on page 24.Setup Wizard:

<sup>⊵n</sup> Live video	D-Link DCS-4701E	Setup Wizard ?
Setup Wizard	Network Setup Wizard	
<sup>3</sup> Settings	<ul> <li>Use the Network Setup Wizard to configure the network set optimum additional activations in the Cotting activity.</li> </ul>	ttings on your Camera. Advanced users can
Advanced Setup	configure additional network options in the Settings menu.	Network Setup Wizard
Camera Info	* Motion Detection Setup	
	Use this wizard to configure Motion Detection and what actic is detected. Experienced users can configure additional optic > Event Management menu.	ons the Camera should perform when motion ons in the Settings > Recording Management
		Motion Detection Setup Wizard

## **Network Setup Wizard**

This wizard will guide you through a step-by-step process to configure your camera and connect it to the Internet. Click **Next** to continue.





#### Step 1:

Select how the camera will connect to the Internet.

- If your camera is connected to a router, or you are unsure how your camera will connect to the Internet, select **DHCP**.
- Select **Static IP Client** if your Internet Service Provider has provided you with connection settings, or if you wish to set a static address within your home network. Enter the correct configuration information and click **Next** to continue.
- If you are using PPPoE, select **PPPoE** and enter your user name and password.

Click Next to continue.

## Step 2:

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.

#### Step 3:

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

#### Step 4:

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

#### Step 5:

Confirm the settings are correct and click **Apply** to save them. The settings will be saved to the DCS-4701E and the camera will restart.



D-Link 2.00

step 2: Configure Dynamic DNS

www.dlinkddns.com

Enable DDNS

Host Name

Time Zone

Enable Daylight Saving

If you have a Dynamic DNS account, you can configure your Camera to update your exten

automatically by enabling DDNS and entering your account details. Click Next to continue

Setup Wizard?

<< www.dlinkddns.com

El Live video

3 Settings

Camera Info

Settings

Advanced Setup

Camera Info

Advanced Setup

- Setungs	<ul> <li>We recommend that you give your Camera a</li> </ul>	unique name to easily identify it on your network.
Advanced Setup	+ IP camera Name DCS-4701E	
Camera Info	•	
	Back Next Cancel	
a Live video	D-Link 2.00	Setup Wizard ?
Setup Wizard	Step 4: Set your Camera's Time 2	Zone

Please set the correct time zone for your Camera to ensure that all events are triggered, captured, and



## **Motion Detection Setup Wizard**

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

Click Next to continue.

#### Step 1

This step will allow you to enable or disable motion detection, specify the detection sensitivity, and define what parts of the camera's view to monitor for motion.

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

Please refer to **"Motion Detection" on page 47** for more information about how to configure motion detection.

Click Next to continue.

#### Step 2

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

Click Next to continue.







#### Step 3

This step allows you to specify where to send the snapshot/video clip/system log when motion is detected. Select **E-mail**, **FTP**, or **Network Storage** and enter the relevant information.

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.

<sup>⊵⊔</sup> Live video		D-Link	01E	Setup Wizard?
Setup Wizard		Step 4: Setup Com	plete	
3 Settings		You have completed you	r IP camera setun. Please click the Back button if y	you want to review or modify your
Advanced Setup	+	settings or click on the A	pply button to save and apply your settings.	for many to remember of mounty your
Camera Info		Motion Detection :	Disable	
		EVENT :	Video Clip	
		Schedule Day :	Sun ,Mon ,Tue ,Wed ,Thu ,Fri ,Sat ,	
		Schedule Time :	Always	
		Alerts and Notification :	Do not notify me	
		Back Apply	Cancel	

# Settings Network Settings

## LAN Settings

Use this section to configure the network connections for your camera. All relevant information must be entered accurately. Please note that PPPoE must be disabled to make any changes on this page; refer to "PPPoE" on page 27 for more details. After making any changes, click the **Save** button to save your changes.

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

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

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

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

- Subnet mask: This number is used to determine if the destination is in the same subnet. The default value is 255.255.255.0.
- **Default router:** Enter the router/gateway used to forward frames to destinations in a different subnet. Invalid router/gateway settings may cause the failure of transmissions to a different subnet.
  - **Primary DNS:** Enter the primary domain name server for translating domain names to IP addresses.
    - **Secondary** Enter the secondary domain name server for translating domain names to **DNS:** IP addresses.

<sup>®⊐</sup> Live video	D-Link DCS-4701	E	LAN Settings
🎾 Setup Wizard	LAN SETTINGS		
🕸 Settings	- DHCP		
Network Settings	Static IP Client		
LAN Settings	IP address	192.168.1.101	
IPv6	Subnet mask	255.255.255.0	
PPPoE	Default router	192.168.1.1	
HTTP and HTTPS	Primary DNS	192.168.168.250	
RTSP and Multicast	Secondary DNS	192.168.168.201	
Bonjour			
► Camera Settings			Save
▶ Event Management			
advanced Setup	•	Copyright @2018 D-Link Corporation	

## IPv6

Use this section to configure your camera's IPv6 settings. After making any changes, click the **Save** button to save your changes.

**Enable IPv6:** Enable the IPv6 setting to use the IPv6 protocol.

Manually Setup The IP Address:

y Enabling the option allows you to manually set up the address, specify an optional IP address, specify an optional router address, and an optional series primary DNS address. You can click the **Information** button to see the IPv6 address lists for the host, gateway, and DNS server.



## ΡΡΡοΕ

Use this section to configure your camera's PPPoE settings. After making any changes, click the Save button to save your changes.

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

User Name / Enter the username and password for your PPPoE account. Re-enter your password: password in the Confirm Password field. You may obtain this information from your ISP.

**PPPoE Status:** This shows your current PPPoE connection status.



## **HTTP and HTTPS**

Use this section to configure the HTTP and HTTPS access settings for your camera. After making any changes, click the **Save** button to save your changes.

## HTTP

HTTP Port: The default port number is 80.

Access Name The default name is **video#.mjepg**, where **#** is the number of the stream. for Stream 1~2:

<sup>™</sup> Live video	D-Link DCS-4701E	HTTP
🎋 Setup Wizard	HTTP HTTPS	
🕸 Settings -		
• Network Settings	HTTP	
LAN Settings	HTTP port 80	
IPv6	Access name for stream1 video1.mjpeg	
PPPoE	Access name for stream2 video2.mjpeg	
HTTP and HTTPS		
RTSP and Multicast		Save
Bonjour		
► Camera Settings		
Event Management		
Advanced Setup +	Copyright @2018 D-Link Corporation	

## HTTPS

**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.

**Enable** Enable the HTTPS service.

## HTTPS Secure

Connection:

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

- Method:
- 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 **HTTPS secure connection**.

<sup>™</sup> Live video	<b>D-Link</b>	HTTPS?
🎾 Setup Wizard	HTTP HTTPS	
Settings	-	
Network Settings	HTTPS port	
LAN Settings	HTTPS port 443	
IPv6	HTTPS	
PPPoE	Enable HTTPS secure connection	
RTSP and Multicast	Create certificate method	
Bonjour	Create self-signed certificate automatically	
- Camera Settings	Create self-signed certificate manually	
Event Management	Create certificate request and install	
Advanced Setup	Copyright @2018 D-Link Corporation	

## **RTSP and Multicast**

Use this section to configure your camera's RTSP and multicast stream settings. After making any changes, click the **Save** button to save your changes.

#### RTSP

- Authentication: Choose to enable or disable RTSP digest encryption. Digest encryption uses MD5 hashes.
  - **RTSP Port:** The port number that you use for RTSP streaming to mobile devices, such as mobile phones or tablets. The default port number is 554.
- Access Name You may specify the address of a particular stream. For instance, live1.sdp for Stream 1/2: can be accessed at rtsp://x.x.x.x/live1.sdp where the x.x.x.x represents the ip address of your camera.

#### Multicast

Multicast for<br/>Stream 1/2:The DCS-4701E allows you to multicast each of the available streams via<br/>a group address and specify the TTL value for each stream. Enter the port<br/>and TTL settings you wish to use if you do not want to use the defaults.

러 Live video	<b>D-Link</b> DCS-4701E	RTSP ?
🛱 Setup Wizard	RTSP Multicast	
3 Settings -		
Network Settings	RTSP	
LAN Settings	Authentication Digest V	
IPv6	RTSP port 554	
PPPoE	Access name for stream1 live1.sdp	
HTTP and HTTPS	Access name for stream2 live2.sdp	
RTSP and Multicast		Save
Bonjour		
Camera Settings		
Event Management		
Advanced Setup +	Copyright @2018 D-Link: Corporation	



## Bonjour

Use this section to enable Bonjour, which allows your camera to be accessed more easily on your network. After making any changes, click the **Save** button to save your changes.

**Bonjour:** Enable this to enable Bonjour support.

**Bonjour Name:** Enter a name to identify this camera on Bonjour.

E <sup>1</sup> Live video	D-Link	CS-4701E	Bonjour ?
🏷 Setup Wizard	BONJOUR SE	TTINGS	
Settings	- Enable Boniour		
• Network Settings	Bonjour Name	DCS-4701E_2256AA	63 characters maximum
LAN Settings		(Characters you may us	⊐ e in a Bonjour Name: "upper or lower case
IPv6		letters", "numbers" and '	"hyphens".)
PPPoE			
HTTP and HTTPS			Save
RTSP and Multicast			
Bonjour			
► Camera Settings			
Event Management			
Advanced Setup	+	Copyright @2018 D-Link Corporati	on

## Camera Settings Camera Settings

Use this section to configure the device name and LED behavior for your camera. After making any changes, click the **Save** button to save your changes.

- IP Camera Create a unique name for your camera that will be added to the file name Name: prefix when creating a snapshot or a video clip.
  - LED: You may specify whether or not to illuminate the status LED on the camera. For security reasons, this setting is set to **Off** by default.

<sup>™</sup> Live video	D-Lin	<b>k</b> 2.00		Camera Settings ?
<sup>≫</sup> Setup Wizard	Camera	Settings		
Settings	- IP Camera	Name	DCS-4701E	32 characters maximum
Network Settings				
• Camera Settings	LED			
Image Settings	LED	С	On 🔘 Off	
Video Stream				Save
Event Management				
Advanced Setup	+			
Camera Info	+			
		C	opyright @2018 D-Link Corp	poration

## **Image Settings**

In this section, you may configure the video image settings for your camera. All changes in the Image Settings section will be made immediately. For the other sections, after making any changes, click the **Save** button to save your changes.

#### Image

- Mirror: This will mirror the image horizontally.
  - Flip: This will flip the image vertically. When turning Flip on, you may want to consider turning **Mirror** on as well.
- Anti-Flicker: Select the frequency used by your power lines to avoid interference or distortion.
- White Balance: Use the drop-down box to change white balance settings to help balance colors for different environments. You can choose from Auto, Outdoor, Indoor.
  - Exposure Changes the exposure mode. Use the drop-down box to set the camera for Mode: Indoor, Outdoor, or Night environments, or to Moving to capture moving objects. You can also create 3 different custom exposure modes. Max Gain will limit the brightness of the exposure.
  - **Denoise:** This setting controls the amount of noise reduction that will be applied to the picture.

Link     200     Pincy Max     Pincy Max       Pathing     DR and IX     DS and IX     DS and IX       Vetwork Strings     LINE VIDEO       • deners Strings     LINE VIDEO       • deners Strings     INF Control       • deners Strings     INF Control       • deners Strings     INF Control       • deners Info     On     Off       • deners Info     On     Off       • fip     On     Off       • fip     On     Off       • deners Info     On     Off       • deners Info     On     Off       • fip     On     Off       • fip     On     Off       • deners Info     On     Off       • fip     Max Gain [5] dB       • fip     On     Off       • fip     Max Gain [5] dB       • fip     Inter       • fip     Max Gain [5] dB       • fip     Inter       • fip     Max Gain [5] dB       • fip     Inter       • fip     Inter       • fip     Inter	El live video		DC9.4701F	
Draw III       05 Milling       05 Privey Mak         Sectings       •         • Arcend Setings       •         • Core Management       •         • Core Setings       •         • Co	Setun Wizard		D-Link 200	Image 🕜
Network Settings   Contrast strings   Contrast   Narror   Narror   Contrast   MAGE SETTINGS     Marror   Narror   Contrast   Staturation   Staturation <t< th=""><th>© Settings</th><th>-</th><th>Image ICR and IR OSD Privacy Mask</th><th></th></t<>	© Settings	-	Image ICR and IR OSD Privacy Mask	
• Careca Selings         Targe Selings         Targe Selings         Yoke Strems         • Careca Soling	Network Settings		LIVE VIDEO	
Currers Statings   mage statings   Woo Stream   Avanced Stating   Brightness   First   Avanced Stating   Avan	• Camera Settings		BPD 15-11 41-11-11	
Image Settings   Work Management   Advanced Safup   Advanced Safup   Camera Info   Mirror   Image Settings   Image Settings   Mirror   Image Settings	Camera Settings			
Version         Version           Version Serup         •           Version Serup	Image Settings			
• Vert Management           • Advanced Setup           • Comera Indo           • Comera Indo           • Mirror           • On           • On <th>Video Stream</th> <th></th> <th></th> <th></th>	Video Stream			
Advanced Setup         .           Immon         On         Off           Flip         On         Off           Flip         On         Off           Anti-Flicker         Immon         Immon           Exposure Mode         Auto         Immon           Contrast         Immon         Immon           Saturation         Immon         Immon           Provise         Immon         Immon           Vihite Balance         Auto         Immon           Vihite Balance         Immon         Immon           Saturation         Immon         Immon           Exposure Mode         Immon         Immon           Contrast         Immon         Immon           Saturation         Immon         Immon           Sharpness         Immon         Immon           Sharpness         Immon         Immon           Sharpness         Immon         Immon           Sharpness         I	► Event Manageme	nt		
Branera into     Mirror     Mirror     On   Fip   On   Fip   On   Fip   On   On<	Advanced Setup			
Mirror On Of   Flip On Off   Anti Flicker Image: 0 Hz 50 Hz   White Balance Image: 0 Image:	Camera Info	•	IMAGE SETTINGS	
Fip On Of   Anti Flicker Oi 0 Hz   On Oi 0 Hz   Anti Flicker Oi 0 Hz   Anti Flicker Auto Oi   Exposure Mode Auto Oi   Denoise I I   Brightness I I   Staturation I I   Anti Flicker Auto I   Staturation I I   Staturation I I   Exposure Mode Auto I   Mitte Balance I I   Denoise I I   Exposure Mode I I   Image: Auto I I   Exposure Mode I I   Image: Auto		Mirror	On Off	
Anti Flicker () 60 Hz () 50 Hz White Balance Auto () Exposure Mode Auto () Brightness () Contrast () Saturation () Stauration () White Balance Auto () Kharnonese () Exposure Mode () Max Gain () () dB Denoise () Exposure Mode () Stauration () Staur		Flip	On On Off	
And Filcker 0 00 H2 50 H2   White Balance   Laposure Mode Auto Max Gain 0   Brightness 7 1   Contrast 6 1   Saturation 6 1   Khite Balance I 1   Vhite Balance I 1   Vhite Balance I 1   Sturation 6 1   Sharnnese I 1   Image: Sturation 1 1   Brightness 7 1   Contrast 6 1   Sturation 6 1   Sturation 6 1   Sturation 6 1   Sturation 6 1   Sharpness 6 1   Sharpness 6 1   Sturation 6 1   Sharpness 6 1   Sturation 6 1   Sturation 6 1   Sharpness 6 1   Sturation <th></th> <th>A. (1777.)</th> <th></th> <th></th>		A. (1777.)		
White Balance Auto   Exposure Mode Auto   Max Gain Image: Contrast   Image: Contrast Image: Contrast <tr< th=""><th></th><th>Anti Fiicker</th><th></th><th></th></tr<>		Anti Fiicker		
Exposure Mode Auto   Denoise I   Brightness I   Contrast I   Saturation I   Vhite Balance Auto   Exposure Mode Auto   Denoise I   Brightness I   Contrast I   Saturation I   Saturation I   Exposure Mode Auto   Denoise I   Brightness I   I I   Saturation I   I I   I I   I I   I I   I I <td< th=""><th></th><th>White Balance</th><th>Auto 🗸</th><th></th></td<>		White Balance	Auto 🗸	
Denoise Image: Contrast   Brightness Image: Contrast   Saturation Image: Contrast   Vhite Balane Image: Contrast   Exposure Hole Image: Contrast   Denoise Image: Contrast   Brightness Image: Contrast   Saturation Image: Contrast   Sharpness Image: Contrast   Saturation I		Exposure Mode	Auto 🗸 Max Gain 36 🗸 dB	
Brightness ?   Contrast S   Saturation I   Image: Starmane Image: Starmane   Vhite Balance Image: Starmane   Exposure Mode Image: Starmane   Denoise Image: Starmane   Brightness ?   Contrast Image: Starmane   Saturation Image: Starmane   Starpness Image: Starmane   Sharpness Image: Starmane   Starpness Image: Starmane   Image: Starpness Image: Starpness   Image: Starpness <t< th=""><th></th><th>Denoise</th><th>0 🗸</th><th></th></t<>		Denoise	0 🗸	
Contrast I   Saturation I   Shammace I   White Balance Auto   Exposure Mole Auto   Exposure Mole I   Brightness I   Orntrast I   Saturation I   Shampness I   Shampness I   I I <th></th> <th>Brightness</th> <th>7 🗸</th> <th></th>		Brightness	7 🗸	
Saturation Sharmes Townse Subject by the Balance Muto Subject by the Balance Subject by the Balance		Contrast	5 🗸	
Sharmase     White Balance     Exposure Mode     Auto     Max Gain     Brightness     Image: Contrast     Image: Contrast<		Saturation	4 🗸	
White Balance   Exposure Mode   Auto   Max Gain   Denoise   Image: Im		Sharnness		
Exposure Mode Auto   Max Gain   Denoise   Image: strate in the strat		White Balance	Auto	
Denoise Image: Contrast im		Exposure Mode	Auto 🗸 Max Gain 36 🗸 dB	
Brightness 7   Contrast 5   Saturation 4   Sharpness 4   WDR Level 1   3D filter O   OFF		Denoise		
Contrast 5 Saturation 4 Sharpness 4 WDR Level 9 3D filter O N OFF		Brightness		
Saturation 4 V Sharpness 4 V WDR Level 9 V 3D filter ON OFF		Contrast	5 🗸	
Sharpness 4 VDR Level 9 Sharpness 6 Sharpness 9 Sharpn		Saturation	4 🗸	
WDR Level 3D filter ON OFF Reset Default		Sharpness		
3D filter ON OFF		WDR Level		
Reset Default		3D filter	ON OFF	
Reset Default				
			Reset Default	

## Section 3: Configuration

Brightness:	Adjust this setting to compensate for backlit subjects.	D
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 to determine how much sharpening to apply to the image.	
WDR Level:	Wide Dynamic Range (WDR) helps improve exposure, making it easier to see objects in very bright or dark areas of the camera's image. Specify a value to determine how much WDR adjustment to apply to the image, or select <b>None</b>	

**3D Filter:** This reduces the amount of image noise when viewing a low-light environment.

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

D-Link	4/01E	
2.00		initiage of
White Bala	ance Auto 🗸	
Exposure	Mode Auto 🗸 Max Gain 36 🗸 dB	
Denoise		
Brightness	7 🗸	
Contrast	5 🗸	
Saturation	4	
Sharpness	5 4	
WDR Leve	el 🖸 🗸	
3D filter	ON OFF	
	Reset Default	

## ICR & IR

Use this section to configure the IR LED and IR-cut removable filter behavior for your camera.

ICR

- Automatic: The Day/Night mode is set automatically. Generally, the camera uses Day mode and switches to Night mode when needed. Use the **Sensitivity** drop-down box to select when the camera should switch to Night mode. The text to the right of the drop-down box shows what the current lighting conditions are like, and you can refresh this information by clicking the **Refresh** button.
- Day Mode: Day mode enables the IR Cut Filter and turns off the IR LEDs.
- Night Mode: Night mode disables the IR Cut Filter and turns on the IR LEDs.
  - Schedule Set Day/Night mode using the schedule set in the drop-down boxes. The camera will enter Day mode at the starting time and return to Night mode at the ending time.
     Activate the Disable IR LED to set Day mode for the set times.

#### **IR Light**

- **IR Light** The camera can enable or disable the IR (infrared) light according to your preferences. This setting provides additional controls depending on your specific application.
  - Off: Disables the IR light.
  - **On:** Enables the IR light.
- Sync With ICR: The IR light will turn on when the ICR filter is disabled (night mode).
  - Schedule: The IR light will turn on or off according to the schedule that you specify below.



IR LIGHT	
IR Light Control	Highest 🗸
Off	
On	
Sync. With ICR	
O Schedule	
	IR Light Control On(24hr)
	From 00 V 00 V To 23 V 59 V
	Save
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## **OSD Settings**

- **OSD:** Select this option to enable the On-Screen Display feature for your camera. This will allow some information to appear in the top-left corner of the camera's video.
- Label: Enter a label for the camera, which will be shown on the OSD when it is enabled.

#### **Privacy Mask**

- **Enable Privacy Mask Setting:** The Privacy Mask setting allows you to click and drag the mouse cursor over the camera image to draw maximum 3 rectangular areas which will be blocked/excluded from recordings and snapshots. Click the Save button to save your changes.
  - **Restore All:** Clear all privacy mask areas.





## **Video Stream**

You may configure up to 2 video profiles with different settings for your camera. This allows you to set different settings for recording video and for viewing your video remotely, for example. After making any changes, click the **Save** button to save your changes.

- Aspect Ratio: Set whether you want your camera to use a 4:3 or 16:19 aspect ratio for its video. When changing this setting, you will need to redo setup for motion detection, privacy masks, and preset points.
  - Mode: Set the video codec to be used to H.264, H.265, or JPEG.
  - Frame Size: Select what frame size to use. Frame size determines the total capture resolution. Larger frame sizes provide more detail, but will require more bandwidth.
- MaximumYou can set the maximum frame rate. A higher frame rate provides smootherFrame Rate:motion for videos and requires more bandwidth. Lower frame rates will<br/>result in stuttering motion and require less bandwidth.

<sup>©⊐</sup> Live video	D-Link 2.00	Video Stream 🕜
<sup>外</sup> Setup Wizard	VIDEO SETTINGS	
Settings	-	Warning: Change the aspect ratio
Network Settings	Aspect ratio	i6.9 vill clear the settings of privacy mask
Camera Settings	•	and preset and motion detection.
Camera Settings		Save
Image Settings	VIDEO PROFILE 1	
Video Stream	Mode	
Event Management	Frame size	1920x1080
advanced Setup	•	
Camera Info	Maximum frame rate	30 🗸

Video quality	
Constant bit rate	4M
Fixed quality	C Excellent V
VIDEO PROFILE 2-	
Mode	H264 🗸
Frame size	1280x720 🗸
Maximum frame rate	30 🗸
Video quality	
Constant bit rate	2M
Fixed quality	C Excellent V

- Constant Bit You can set the bit rate to use for this video profile. Rate:
- **Fixed Quality:** Select the image quality level for the camera to try to maintain. Higher quality levels will result in increased bit rates and use more bandwidth.



## **Event Management** Event Management

The DCS-4701E has a comprehensive event management system that lets you configure the camera to perform certain actions when an event occurs. For example, when motion is detected, you can have snapshots sent to an e-mail address. You can also configure the camera to take regular video recordings according to a schedule you define. Detailed information for the following steps can be found in the following pages.

#### Step 1: Select your destination Server and Media type



#### Step 2: Select your Trigger event and Action



#### When an event is triggered:



## **Event Management**

The Event Setup page includes 4 different sections:

- Server
- Media
- Event Settings
- Recording
- 1. To add a new server, media, event, or recording item, click **Add**. A screen will appear and allow you to update the fields accordingly.
- 2. To delete the selected item from the server, media, event, or recording drop-down menus, click the **Delete** button next to it.
- 3. Click on the name of an item to edit it.

<sup>®</sup> Live video	D-Link	DCS-4701E		Event Management ?
<sup>%™</sup> Setup Wizard	Event Manageme	nt Motion Det	ection	
© Settings -	Server			
Network Settings	Name	Туре	Address/Location	
- Camera Settings	Add	✓ Delete		
- Event Management	Media			
Event Management	Wedia			
Advanced Setup +	Name	Туре	Source	
Camera Info +	Add	✓ Delete		
	Event			
	Name Status Su	ın Mon Tue V	/ed Thu Fri Sat Time T	rigger
	Add	✓ Delete		

Media	
Name Type Source	
Add Delete	
Event	
Name Status Sun Mon Tue Wed Thu Fri Sat Time Trigger	
Add Delete	
Recording	
Name Status Sun Mon Tue Wed Thu Fri Sat Time Source Destination	
Add V Delete	
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#### Server

You can configure a server for each server type, and up to 5 FTP servers. After making any changes, click the **Save** button to save your changes.

Server Name: Enter the name for the server.

- **Email:** If you want to use an e-mail address for your server, select this and enter the settings for your target e-mail account.
- **FTP:** If you want to use an FTP server for your server, select this and enter the settings for your target FTP server.
- **Network** If you want to use a network storage device for your server, select this and **Storage:** enter its settings here.

El Live video	E	)-Link DCS-4701E		Event Management?
Setup Wizard	E	vent Management Motion E	Detection	
Settings	- 8	Server Type		
Network Settin	ngs	Server Name:		
- Camera Setting	gs	Email		
• Event Manager	ment	Sender email address		
Event Manage	ement	Recipient email		
Advanced Set	tup •	address		
Camera Info	٠	Server address		
		User name		
		Password		
	Port	25		
	This server re	equires a secure conne	ection (StartTLS)	
		Squires a secure conin	court court coy	
O FT	Р			
	Server address			[
	Port	21		
	Login Type	Username & Pass	word 🗸	
	User name			
	Password			
				1
	Remote folder name			
	Passive mode	9		
O Net	work storage			
0 1100	for storage			
1	Network storage			
ŀ	ocation			
(	for example:\\my_nas	\disk\folder)		
1	Madaman			
1	workgroup			
ι	Jser name			
F	Password			
,	Deimana MINC an			
F	rimary WINS server			
			Test Sa	ve Cancel

## Media

There are three types of media: **Snapshot**, **Video Clip**, and **System Log**. You can make a media entry for each type. After making any changes, click the **Save** button to save your changes.

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

- **Snapshot:** Select this option to set the media type to snapshots.
  - Source: Set the video profile to use as the media source. Refer to "Video Stream" on page 37 for more information on video profiles.
- Send pre-event Set the number of pre-event images to take. Pre-event images are images image(s): taken before the main event snapshot is taken.

**Send post**- Set the number of post-event images to take. Post-event images are images event image(s): taken after the main event snapshot is taken.

For example:

If both the Send pre-event images and Send post-event images are set to 4, a total of 9 images are generated after a trigger is activated.



I Live video	D-Link DCS-4701E	Event Management?
<sup>34</sup> Setup Wizard	Event Management Motion Detection	
Settings -	Media Type	
Network Settings	Media name:	
<ul> <li>Camera Settings</li> </ul>		ŕ
• Event Management	Snapshot	
Event Management	Source: profile 1 🗸	
Advanced Setup +	Send 1 pre-event image(s) [0~4]	
Camera Info +	Send 1 post-event image(s) [0~7]	
	File Name Prefix:	
	Add date and time suffix to file name	
Video Clip		
Source: profile 1 🗸		
Pre-event recording:	Second(s) [0~3]	
Maximum duration:	Second(s) [1~100]	
Maximum file size:	Kbytes [300~5000]	
File Name Prefix:		
O System log		
		Save
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File name	The prefix name will be added to the file name.
prefix:	



Add date and	Enable this to add the date and time the snapshot was recorded as a file
time suffix to	name suffix.
file name:	

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

Source: Set the video profile to use as the media source. Refer to "Video Stream" on page 37 for more information on video profiles.

**Pre-event** This sets how many seconds to record before the main event video clip starts. **recording:** 

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

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

File Name This is the prefix that will be added to the filename of saved video clips. Prefix:

**System log:** Select this option to set the media type to system logs. This will save the event to the camera system log, but will not record any snapshots or video.

	D-Link 200	Event Management?
C Setup Wizard	Event Management Motion Detection	
Settings -	Media Type	
Network Settings	Media name:	
Camera Settings		
• Event Management	Snapshot	
Event Management	Source: profile 1 🗸	
Advanced Setup +	Send 1 pre-event image(s) [0~4]	
Camera Info +	Send 1 post-event image(s) [0~7]	
	File Name Prefix:	
	Add date and time suffix to file name	
Video Clip		
Source: profile 1 🗸		
Pre-event recording:	Second(s) [0~3]	
Maximum duration:	Second(s) [1~100]	
Maximum file size:	Kbytes [300~5000]	
File Name Prefix:		
System log		
		Save

#### Event

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

- **Event name:** Enter a name for the event.
- Enable this Toggle this to activate this event. event:
  - **Priority:** Set the priority for this event. Events with higher priority will be executed first.
  - **Delay for:** Specify the delay time before allowing this event to be triggered again. This is used for both motion detection events and event triggers.

#### Trigger

- Video Motion Detection: Selecting this will trigger the event when motion is detected during live video monitoring. Make sure you have enabled motion detection and specified what part of the image to monitor for motion. For more details, refer to "Motion Detection" on page 47.
  - **Periodic:** Selecting this will trigger the event in specified intervals. The trigger interval unit is in minutes.
- System Boot: Selecting this will trigger an event when the system boots up.

Setup Wizard     Event Management       Image: Settings     Event Management       Image: Network Settings     Event name:	
Image: Settings       -         • Network Settings       Event name:         • Camera Settings       Image: Settings         • Camera Settings       Image: Settings         • Event Management       Priority: Imormation         Event Management       Delay for 10 seconds before detecting next event [For motion detection]         Image: Settings       Image: Settings         Image: Settings </th <th>_</th>	_
Network Settings     Event name:     Camera Settings     Event Management     Priority: frommal      Event Management     Delay for 10 seconds before detecting next event [For motion detection]     Advanced Setup     Trigger     Camera Info     Video motion detection	
Camera Info     Camera In	
Event Management Priority: normal Event Management Delay for 10 seconds before detecting next event [For motion detection]     Advanced Setup Trigger Camera Info  Video motion detection	
Event Management Delay for 10 seconds before detecting next event [For motion detection]  Advanced Setup Trigger Camera Info  Video motion detection	_
Advanced Setup  Trigger  Camera Info  Video motion detection	
Camera Info	
Video motion detection	
O Periodic	
Trigger every 1 minutes	
O System boot	
Event Schedule	
Sun Mon Tue Wed Thu Thu Sat	
Time	
Always	
Action	
() toot?	
Attached media: T2	
Save	

## **Event Schedule**

Specify when you want to monitor for this event. Select which days to monitor for this event, then select **Always** or enter the time interval to monitor for the specified event.

Action: Select the actions you want the camera to take when the event happens. Select the Server to use, then choose the Media you want to save to it. Please note that you need to set up your Server and Media entries first.



#### Recording

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

**Recording** Enter a name for the recording. **Entry Name:** 

- **Enable This** Select this to enable the recording function. **Recording:** 
  - **Priority:** Set the priority for this entry. An entry with a higher priority value will be executed first.
  - Source: Select the video profile to use as the recording source.

#### **Recording Schedule**

Use the checkboxes to set which days to record video on. Select **Always** to record for the entire day, or select **From** and select what period of time you want to record using the drop-down boxes.

- **Destination:** Select a storage destination that was configured in Server to send recordings there.
- Size of Each If this is selected, files will be split based on the file size you specify. File for Recording:

Time of If this is selected, files will be based on the maximum length you specify. Each File for Recording:

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

El Live video	D-Link DCS-4701E	Event Management ?
<sup>%</sup> ⊁ Setup Wizard	Event Management Motion Detecti	lion
© Settings -	Recording	
Network Settings	Recording entry name:	
- Camera Settings		
• Event Management	Enable this recording	
Event Management	Priority: normal 🗸	
Advanced Setup +	Source: profile 1 🗸	
Camera Info +	Recording Schedule	
	Sun Mon T	Tue Wed Thu
	Fri Sat	FINE FINE
Always		
○ From 00 ∨ 00	✓ To 23 ✓ 59 ✓	
Recording Settings -		
Destination None V		
Total cycling recording size	1000 Mbytes [200~200	00000]
Size of each file for rec	ording: 10 🗸 Mbytes	
Time of each file for re	cording: 10 🗸 seconds	
File Name Prefix:		
		Save
	Copyright @2018 D-Link Corpo	oration

## **Motion Detection**

Motion detection enables the camera to monitor the video feed for movement. Here, you can adjust the sensitivity settings that determine whether motion is detected by the camera or not. After making any changes, click the **Save** button to save your changes.

- Enable VideoMotion: Enable this to enable the motion detection feature of your camera. Pleasenote that you must create at least one motion detection box for the camera to detect motion.
  - **Sensitivity:** Set how sensitive motion detection will be from 0% to 100%. A low sensitivity means that there must be large changes between two images in order to detect motion, and a high sensitivity means that even small changes will cause motion to be detected.

Low sensitivities may be useful when monitoring an area that has flickering lights or a window to the outside in view. High sensitivities may be useful when monitoring an area that rarely changes, such as a storeroom or warehouse.

**Percentage:** Set how much of the area being monitored for motion must change for motion to be detected. A low percentage means that only part of the area being monitored has to change to detect motion, and a high percentage means that most of the area needs to change to detect motion.

Low percentages can be useful when monitoring an area such as a large room, and high percentages can be useful when you are only monitoring a specific part of the camera's view, such as a doorway.

EI Live video	D	)-Link	Motion Detection ?
🏁 Setup Wizard	Ev	vent Management Motion Detection	
Settings	- L	LIVE VIDEO	
Network Settings	Г	Enable Video Motion	
► Camera Settings	3	and the Armin	
Event Management		4 1211/14	Sensitivity
Event Management		H Martin P	85 0-100%
Advanced Setup		T any in management	Percentage
Camera Info	•	Clear all Restore all Select all	10 0-100%
			Save
		Copyright @20	018 D-Link Corporation

## Advanced Setup Advanced UPnP

Enabling Video Motion will allow your camera to use UPnP to automatically set up port forwarding on your router. After making any changes, click the **Save** button to save your changes.

Enable UPnP	Enabling this setting allows your camera to be configured as a UPnP device	<sup>©3</sup> Live vide		
Presentation:	on your network			
resentation		Settings		
Enclus	Fundalized this activity allows the second as a delivery for wording a patrice into	Advance		
Enable	Enabling this setting allows the camera to add port forwarding entries into	• Advance		
UPnP Port	the router automatically on a UPnP capable network.	UPnP		
Forwarding:		DDNS		
-		SNMP		
Forwarding	If LIPnP Port Forwarding is enabled you can set which port to use for	CoS and		
Porwarding Port:	if office for the warding is enabled, you can set which port to use for			
	forwarding.			
		Camera		
Forwarding	If UPnP Port Forwarding is enabled, this will show the UPnP Port Forwarding			

Live video	D-Link 2 00		UPnP 🕜
<sup>t</sup> Setup Wizard	UPnP		
Settings +	Enable UPnP presentation		
Advanced Setup -	Enable UPnP port forwarding		
Advanced	Forwarding Port	1024	
UPnP	Forwarding Status	UPnP forwarding is inactive	
DDNS			
SNMP			Save
CoS and QoS			
Access List			
Camera Configuration			
Camera Info +			
	Сору	right @2018 D-Link Corporation	

Status: status.

## DDNS

DDNS allows you to compensate for changing IP addresses by having a URL that automatically points to the current IP address of your camera. To do this, you will need to have an account with one of the DDNS services listed in the drop-down box on this page. After making any changes, click the **Save** button to save your changes.

**DDNS:** Check this box to enable the DDNS function.

Server Address: Enter your DDNS server address, or select a service from the drop-down menu.

Host Name: Enter the host name of the DDNS service.

- **User Name:** Enter the username or e-mail address used to connect to the DDNS service.
- **Password:** Enter the password used to connect to the DDNS service.

Verify Enter your DDNS service password again.

Password:

- **Timeout:** You can set up how often the camera notifies the DDNS service of its current global IP address by entering a whole number in hours.
  - Status: This shows the current status of your DDNS updates.

<sup>®⊐</sup> Live video	D-Link	-4701E	DDNS ?
翔 Setup Wizard	DYNAMIC DNS	SETTING	
Settings	* Enable DDNS		
advanced Setup	- Server Address	www.dlinkddns.com	<< www.dlinkddns.com
Advanced	Host Name		
UPnP	User Name		
DDNS	Password		
SNMP	Verify Password		
CoS and QoS	Timeout	24	(hours)
Access List	Status	Active	
► Camera Configuration			
Camera Info	•		Save
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## SNMP

Here you can set the Simple Network Management Protocol (SNMP) settings for the camera, which allow for SNMP management of the camera. After making any changes, click the **Save** button to save your changes.

Enable	<b>Enable</b> Enable this option to allow for SNMPv1 and SNMPv2c management of the			
SMNPv1,	camera.			
SNMPv2c				
JINIVII VZC.				
		Advanced		
Read/Write	/Write Enter a name for the read/write community of your SNMP server.			
Community:		DDNS		
		SNMP		
Read Only	Enter a name for the read-only community of your SNMP server	CoS and QoS		
Community	Enter a name for the read only commany of your only berven	Access List		
Community.		Camera Configuration		
		Camera Info		
Enable	Enable this option to allow SNMPv3 management of the camera.	D-Link		
SNMPv3:		Enable SNMF		
		Read/Write Se		
Read/Write	Enter a name for the read/write community of your read/write SNMP server.	Authentication		
Security Name:		Authentication		
		Autoritation		
Authentication	Enter the type of authentication used by your read/write SNMP server	Encryption pa		
Type	Enter the type of authentication used by your read/ write sixin server.			
Type:		Authentication		
		Authentication		
Authentication	Enter the authentication password used for your read/write SNMP server.	Encryption pa		
Password:				
Encryption	Enter the encryption password used for your read/write SNMP server.			
Password				
1 0350010.				
	Fortune many fourth a word and a second se			
Read Only	Enter a name for the read-only community of your read-only SNMP server.			
Security Name:				

Live video	D-Link		SNMP ?
Setup Wizard	SNMP Configuration		
Settings +	Ŭ		
Advanced Setup -	Enable SNMPv1, SNMPv2c		
	Read/Write community	public	
Advanced	Read only community	private	
UPnP	Enable SNMPv3		
DDNS	Read/Write Security name	public	
SNMP	Authentication type	MD5 🗸	
CoS and QoS	Authentication password		
Access List	Encorolian pageword		
Camera Configuration	Deed eet eessite ees		
Camera Info	Read only security name	private	
Camera into		a seco	
<b>D-Link</b> DCS-4701E			SNMP ?
Enable SNMPv3			
Read/Write Security name	public		
	1.100		
Authentication type	MD5 V		
Authentication password			
Epopuration pageword			
Encryption password			
Read only security name	private		
Authentication type	MD5 V		
Authentication password			
Encryption password			
			Save
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## Section 3: Configuration

- Authentication Enter the type of authentication used by your read-only SNMP server. Type:
- Authentication Enter the authentication password used for your read-only SNMP server. Password:
  - **Encryption** Enter the encryption password used for your read-only SNMP server. **Password:**

Time DCS-4701E		SNMD
2.00		
Enable SNMPv3		
Read/Write Security name	public	
Authentication type	MD5 V	
Authentication password		
Encryption password		
Read only security name	private	
Authentication type	MD5 🗸	
Authentication password		
Encryption password		
		Save
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## CoS and QoS

Class of Service (CoS) and Quality of Service (QoS) allow you to prioritize surveillance traffic on your network to ensure that your cameras can stream video smoothly and remain accessible even when there is heavy traffic on your network. Your network must support CoS or QoS in order to use them. After making any changes, click the **Save** button to save your changes.

**Enable CoS:** Enabling the Class of Service setting implements a best-effort policy to prioritize traffic without making any bandwidth reservations.

To use CoS, enable it, enter the VLAN ID to use for the camera, and set the priority for your **Live Video**, **Live Audio**, **Event/Alarm**, and **Management** camera traffic.

**Enable QoS:** Enabling QoS allows you to specify a traffic priority policy to ensure a consistent Quality of Service during busy periods. If the network camera is connected to a router that itself implements QoS, the router's settings will override the QoS settings of the camera.

To use QoS, enable it and set the priority for your **Live Video**, **Live Audio**, **Event/Alarm**, and **Management** camera traffic.

En Live video	<b>D</b> -1	Link	D1E	CoS and QoS
<sup>%™</sup> Setup Wizard	Co	S SETTINGS -		
Settings	•			
Advanced Setup	-	LOS		
+ Advanced		VDAN ID	1 [0~4030]	
UPnP		Live video		
DDNS		Eive audio		
SNMP		EvenuAlarm		
CoE and CoE		management		
Cos and Qos	Qo	S SETTINGS -		
Access List		QoS		
Camera Configuration		Live video	0 🗸	
Live a	udio 0	×		
Event	Alarm 0	×		
Manag	gement 0	×		
QoS SETTI	NGS			
QoS				
Live vi	ideo 0	×		
Live a	udio 0	×		
Event	Alarm 0	×		
Manag	gement 0	×		
				Save
	С	opyright @2018 I	D-Link Corporation	

## **Access List**

Here you can define which IP addresses are allowed to view your DCS-4701E. You can set up to 7 IP address ranges for both the allow and deny lists.

Allow List: The section lets you define what IP addresses have access rights to the camera.

**Note**: When adding entries to the Allow list, make sure the first entry includes the IP address of the computer or device you are using to access the camera. Otherwise, you may be blocked from accessing the camera after adding the entry to the Allow list.

**Start IP** The starting IP address of the IP address range for the devices (such as a **Address:** computer) that have permission to access the video of the camera.

- **End IP Address:** The ending IP address of the IP address range for the devices (such as a computer) that have permission to access the video of the camera. Click **Add** to save your changes.
  - **Delete Allow** Select an entry to remove from the Allow List, then click **Delete**. List:
    - **Deny List:** The list of IP addresses that have no access rights to the camera.
      - **Start IP** The starting IP address of the IP address range for the devices (such as a **Address:** computer) that will be denied access to the camera.
- **End IP Address:** The ending IP address of the IP address range for the devices (such as a computer) that will be denied access to the camera. Click **Add** to save your changes.
  - **Delete Deny** Select an entry to remove from the Deny List, then click **Delete**. List:

**Note**: All addresses in the Deny List will be denied access, even if they are also in the Allow List.



## Camera Configuration Save and Load Configuration

In this section, you may back up or restore the camera configuration.

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

Load FromLocate a pre-saved configuration by clicking Browse and then restore theLocal Hardpre-defined settings to your camera by clicking Load Configuration.Drive:



## **Factory Reset**

Here you can reset the camera configuration back to the factory defaults.

RestoreYou may reset your camera and restore the factory settings by clickingto FactoryRestore Factory Defaults.Default:



## **Reboot Device**

Here you can reboot the camera, or set a schedule to reboot the camera automatically.

**Reboot Device:** This will restart your camera.

Schedule If you want your camera to reboot on a regular schedule, enable this option, then select the days and time you want the camera to reboot on and click the Save button.



## **Firmware Update**

Here you can update the camera's firmware. The current version of the firmware is shown next to the D-Link logo at the top of the page.

**File Path:** To update the firmware, select a firmware file to use from your hard drive by clicking **Browse...**, then click the **Upload** button.

**Note**: While the firmware is being updated, do not close the web browser or disconnect your camera's power or network connection until the update is complete.



## Camera Options Camera Info

This page displays detailed information about your camera, the services running on your camera, and active video streams.

<sup>I</sup> Live video		D-Link	DCS-4701E	Camera Info 🕐
<sup>℁</sup> Setup Wizard		INFORMATIO	2.00 DN	
ଦ୍ଧ Settings	+	IP Camera Name	2 DCS-4701E	
Advanced Setup	+	Time & Date	Fri Mar 9 1:52:3 2018	
Camera Info	-	Firmware Versior	1 2.00.04	
Camera Info		Hardware Version	n B	
Camera Info		MAC Address	00:CA:83:71:00:02	
► Time		IP Address	192.168.1.101	
► Administration Settings		IP Subnet Mask	255.255.255.0	
System Log		Default Gateway	192.168.1.1	
		Primary DNS	192.168.168.250	
		Secondary DNS	192.168.168.201	
			Copyright @2018 D-Link Corporation	

## Time Time Settings

This section allows you set the time zone and Daylight Saving settings for your camera.

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

- Daylight If your region uses Daylight Saving time, you can enable it here. SelectSaving: Set date and time manually if you want to manually set the offset and the period of time that the Daylight Saving correction should be used.
  - **Offset:** Enter the offset that should be used when Daylight Saving is being used.
- Start Time: Set the date and time that Daylight Saving should start.
- End Time: Set the date and time that Daylight Saving should end.

<sup>©]</sup> Live video	D-Link		Time Settings ?
🎾 Setup Wizard	TIME CONFIGURATION -		
Settings +	. Time Zone	(GMT) Coordinated Universa	al Time 🗸
Advanced Setup +			
Camera Info -	Enable Daylight Saving		
Camera Info	Auto Daylight Saving		
• Time	Set date and time manually	۲	
Time Settings	Offset	+02:00 🗸	
Auto Time Config			
Set Date and Time		Month Week Day of w	eek Hour Minutes
Administration Settings	Start time	1 V 1 V Sunday	✓ 0
System Log	End time	1 V 1 V Sunday	V 0 0
Auto Daylight Savii Set date and time r Offset	ng Oranually Orange Transformation of the second se	00 🗸	
Start time End time	Mc 1 1	Week     Day of week       Image: 1     Sunday       Image: 1     Sunday	Hour Minutes 0 0 0 0
	Copyright @2018 D-Link Co	proration	Save

## **Auto Time Config**

This section lets you set your camera's date and time automatically by using an NTP server.

**NTP Server:** Enable this option to set your camera's time using an NTP server, then select an NTP server to use from the drop-down box.



## Set Date and Time

This section lets you manually set your camera's date and time. If you have **NTP Server** enabled in **Auto Time Config**, you will need to disable it before setting the date and time manually.

**Set Date and** Enable this option to manually set the time and date. **Time Manually:** 

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

<sup>©⊐</sup> Live video	D-Link DCS-4701E	Set Date and Time?
Setup Wizard	SET DATE AND TIME MANUALLY	
Settings	Set data and time manually	
Advanced Setup	time settings copy pc time	
Camera Info	- Year 2018 V Month 3 V Day	9
Camera Info	Hour 1 V Minute 53 V Seco	ond 21 🗸
• Time		
Time Settings		Save
Auto Time Config		
Set Date and Time		
Administration Settings	—	
System Log		
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## Administration Settings Admin Password

Here, you may modify the administrator's password for your camera.

New Password Set a new password for the administrator's account. / Retype Password:



## **User Accounts**

Here, you may add user accounts for accessing the camera. User accounts are allowed to access the Live Video page, but cannot access any of the camera's configuration pages.

User Name: Enter a user name for the user you wish to create.

New Password Enter a password for the user you wish to create. / Retype Password:

<sup>™</sup> Live video	D-Link	S-4701E	User Accounts 🕜
🎾 Setup Wizard	ADD USER AC		
Settings	+ User Name		17 users maximum
Advanced Setup	* New Password		64 characters maximum
Camera Info	- Retype Password		Add
Camera Info			
• Time			
Administration Settings			
Admin Password			
User Accounts			
User List			
System Log			
		Copyright @2018 D	-Link Corporation

## **User List**

Here, you may manage the user accounts for accessing the camera.

User Name: If you want to change a user's password, select a user from the drop-down box, enter the new password, then click the **Modify** button.

If you want to remove a user from the user list, select a user from the dropdown box, then click the **Delete** button.



## **Camera Log**

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.

<sup>IES</sup> Live video	D-Li	DCS-4701E	System Log ?
<sup>⋟</sup> Setup Wizard	CURF	RENT LOG	
ଞି Settings +	1. 20	018/03/09 01:50:16 admin login Ok from 192.168.1.103	
Advanced Setup +	2. 20	018/03/09 00:55:04 system set to new time 2018/03/09 00:54:59	9.
Camera Info -	3. 20	018/03/09 00:54:53 network port connected.	
Camera Info	4. 20	018/03/09 00:54:40 system power on.	
▶ Time	5. 20	018/03/08 02:25:43 admin login Ok from 192.168.1.103	
<ul> <li>Administration Settings</li> </ul>	6. 20	018/03/08 00:24:42 network port connected.	
System Log	7. 20	018/03/08 00:24:29 system power on.	
	8. 20	018/03/07 09:58:44 admin login Ok from 192.168.1.101	
	9. 20	018/03/07 09:48:51 admin login Ok from 192.168.1.101	
	10. 20	018/03/07 09:48:18 network port connected.	
		Copyright @2018 D-Link Corporation	

# **Technical Specifications**

Technical Specifications			
Camera			
Camera Hardware Profile	<ul> <li>1/2.7" 2-megapixel progressive CMOS sensor</li> <li>30 meter IR illumination distance</li> <li>Minimum illumination: <ul> <li>0.1 lux (color)</li> <li>0.05 lux (B/W)</li> <li>0 lux (IR LED on)</li> </ul> </li> <li>Built-in Infrared-Cut Removable (ICR) Filter module</li> <li>10x digital zoom</li> <li>Minimum object distance 0.5 m</li> </ul>	<ul> <li>Focal length: 3.6 mm</li> <li>Aperture: F1.8</li> <li>Angle of view: <ul> <li>(H) 90°</li> <li>(V) 50°</li> <li>(D) 104°</li> </ul> </li> </ul>	
Camera Housing	IP66 compliant weatherproof housing	Wire-in bracket	
Image Features	<ul> <li>Configurable image size, quality, frame rate, and bit rate</li> <li>Time stamp and text overlays</li> <li>Configurable motion detection windows</li> <li>Configurable privacy mask zones</li> </ul>	<ul> <li>Configurable shutter speed, brightness, saturation, contrast, and sharpness</li> <li>WDR</li> <li>3D filter</li> </ul>	
Video Compression	<ul> <li>Simultaneous H.265/H.264/MJPEG format compression</li> <li>H.265/H.264/MJPEG multicast streaming</li> </ul>	JPEG for still images	
Video Resolution	• 16:9 - 1920 x 1080, 1280 x 720, 800 x 448, 640 x 480 up to 30 fps	• 4:3 - 1440 x 1080, 900 x 720, 800 x 592, 640 x 480 up to 30 fps	
External Device Interface	• 10/100 BASE-TX Fast Ethernet port	Supports 802.3af PoE	
Network			
Network Protocols	<ul> <li>IPv6</li> <li>IPv4</li> <li>TCP/IP</li> <li>UDP</li> <li>ICMP</li> <li>DHCP client</li> <li>NTP client (D-Link)</li> <li>DNS client (D-Link)</li> <li>SMTP client</li> </ul>	<ul> <li>FTP client</li> <li>HTTP / HTTPS</li> <li>Samba client</li> <li>PPPoE</li> <li>UPnP port forwarding</li> <li>RTP / RTSP/ RTCP</li> <li>IP filtering</li> <li>Multicast</li> <li>SNMP</li> <li>ONVIF compliant</li> </ul>	
Security	<ul> <li>Administrator and user group protection</li> <li>Password authentication</li> </ul>	HTTP and RTSP authentication	

## Appendix A: Technical Specifications

System Management			
Event Management	<ul> <li>Motion detection</li> <li>Event notification and uploading of snapshots/video clips via e-mail or FTP</li> </ul>	<ul> <li>Supports multiple SMTP and FTP servers</li> <li>Multiple event notifications</li> <li>Multiple recording methods for easy backup</li> </ul>	
Remote Management	<ul> <li>Remote management via D-ViewCam™ software</li> <li>Configuration interface accessible via web browser</li> </ul>	Remotely take snapshots/video clips and save to local hard drive	
System Requirements for Web Interface	• Windows 10/8/7 or Mac OS X 10.9 and higher	<ul> <li>Internet Explorer 9 and higher (on Windows), Firefox 12-51, 52 ESR, Chrome 42 and higher, or Safari 9 and higher (on Mac OS X).</li> </ul>	
D-ViewCam™ System Requirements	<ul> <li>Operating System:</li> <li>32-bit: Windows 8 / 7 (SP1)</li> <li>64-bit: Windows 10 / 8 / 7 (SP1) / Server 2012 / Server 2008 R2</li> </ul>	<ul> <li>Web Browser: Internet Explorer 7 or higher</li> <li>Protocol: Standard TCP/IP</li> </ul>	
D-ViewCam™ Software Functions	<ul> <li>Remote management of up to 32 cameras</li> <li>Supports all management functions provided in web interface</li> </ul>	<ul> <li>Viewing of up to 32 cameras on one screen</li> <li>Scheduled, motion triggered, or manual recording options</li> </ul>	
General			
Weight	• 445 g ± 5 %		
External Power Adapter	• Input: 100 to 240 V AC, 50/60 Hz	Output: 12 V DC 1.5 A	
Power Consumption	• 3.2 (DC) / 3.1 W (PoE) ± 5%		
Temperature	• Operating: -30 to 50 °C (-22 to 122 °F)	• Storage: -20 to 70° C (-4° to 158° F)	
Humidity	Operating: 20 % to 80 % non-condensing	Storage: 5 % to 95 % non-condensing	
Certifications	• CE • CE LVD	• FCC • C-Tick	
Dimensions			