

How do I remotely view DCS-2000 or DCS-2100+ cameras that are behind a router or gateway?

For each camera that resides behind a router or gateway, four ports must be forwarded by the router to obtain both audio and video. If audio is not desired, only the HTTP port will need to be forwarded. The four default ports are as follows:

- 80 (TCP) HTTP Port (allows access to web-configuration and transmits video if other ports are not forwarded)
- 5001 (TCP/UDP) Control Channel Port (used to synchronize audio and video)
- 5002 (TCP/UDP) Audio Channel Port (transmits synchronized audio)
- 5003 (TCP/UDP) Video Channel Port (transmits synchronized video)

These port numbers will need to be changed in the camera configuration on each additional camera that is added behind the router. Port numbers can be changed from the **Advanced** > **Network** screen.

The screenshot shows the D-Link DCS-2000 Audio Internet Camera web interface. The top navigation bar includes 'Home', 'Advanced' (selected), 'Tools', 'Status', and 'Help'. On the left, there is a sidebar with 'Network' (selected), 'Video', 'Image Setting', and 'Motion Detection'. The main content area is titled 'Advanced' and contains the following settings:

- ☐ Primary FTP passive mode
- 2nd FTP server: [text box]
- 2nd FTP user name: [text box]
- 2nd FTP password: [text box]
- 2nd FTP remote folder: [text box]
- ☐ Secondary FTP passive mode
- HTTP**
- HTTP port: [80]
- Streaming**
- Control channel port: [5001]
- Video channel port: [5003]
- Audio channel port: [5002]
- ☐ Improve audio quality in low bandwidth environment

At the bottom right, there are 'Apply' and 'Cancel' buttons with green and orange icons respectively.

Practical Example: Three DCS-2000s are behind a DI-604. The router has a public IP address (WAN) of 63.116.231.25 and an internal (LAN) IP address of 192.168.0.1.

Camera 1 IP address: 192.168.0.10 Ports: 80, 5001, 5002 and 5003

Camera 2 IP address: 192.168.0.20 Ports: 81, 6001, 6002 and 6003

Camera 3 IP address: 192.168.0.30 Ports: 82, 7001, 7002 and 7003

Each set of four ports must be forwarded to the respective IP address. Set-up for Camera 1 inside a DI-604's configuration is shown below:

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Virtual Server

Virtual Server is used to allow Internet users access to LAN services.

☒ Enabled ☐ Disabled

Name:

Private IP:

Protocol Type:

Private Port:

Public Port:

Schedule: ☒ Always
☐ From time : AM to : AM
day to

☒ ☐ ☐

Virtual Servers List

Name	Private IP	Protocol	Schedule	
☐ Virtual Server FTP	0.0.0.0	TCP 21/21	always	
☒ Virtual Server HTTP	0.0.0.0	TCP 80/80	always	
☐ Virtual Server HTTPS	0.0.0.0	TCP 443/443	always	

☒ ☐ ☐

Apply Cancel Help

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Firewall Rules

Firewall Rules can be used to allow or deny traffic from passing through the DI-604.

☒ Enabled ☐ Disabled

Name:

Action: ☒ Allow ☐ Deny

Interface: IP Range Start: IP Range End:

Source: IP Range Start: IP Range End:

Destination: IP Range Start: IP Range End:

Schedule: ☒ Always
☐ From time : AM to : AM
day to

☒ ☐ ☐

Firewall Rules List

Action	Name	Source	Destination	Protocol	
☒ Allow	Allow to Ping WAN port	WAN,*	LAN,192.168.0.1	ICMP,8	
☒ Deny	Default	*,*	LAN,*	IP (0),*	
☒ Allow	Default	LAN,*	*,*	IP (0),*	

☒ ☐ ☐

Apply Cancel Help

This will need to be done for each camera and their respective ports.

To contact these cameras from a remote location (across the Internet), use the Public IP address (WAN) of the router along with the appropriate web port. Using the above example:

To remotely contact camera 1 with Internet Explorer, enter <http://63.116.231.25:80>

To remotely contact camera 2 with Internet Explorer, enter <http://63.116.231.25:81>

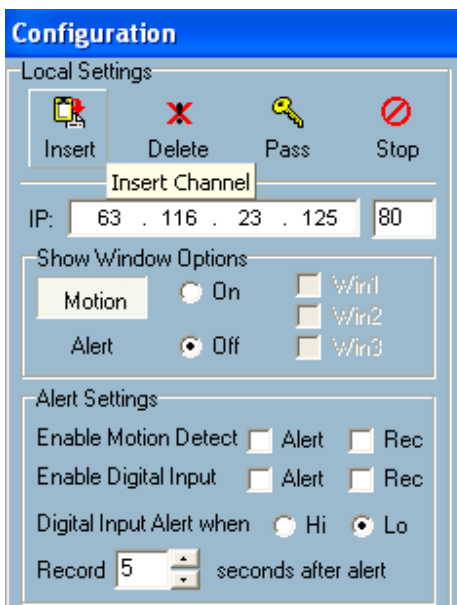
To remotely contact camera 3 with Internet Explorer, enter <http://63.116.231.25:82>

These cameras can also be contacted remotely with IP surveillance (included software).

Step 1 Launch the Monitor application and choose **Function Menu > Camera Configurations**.



Step 2 Enter the routers Public IP address and port number in the IP address field in the top left corner.



Step 3 Click the **Insert** button directly above.

Step 4 Click **Save**.