

# AXIS 241Q and AXIS 241S Video Servers

## User's Manual

Installation instructions are also available in German, French, Italian and Spanish in this manual

## 2 About This Document

This manual is intended for administrators and users of the AXIS 241Q/241S Video Server, and is applicable for software release 4.00. It includes instructions for installing, using and managing the AXIS 241Q/241S on your network. Previous experience of networking will be of use when installing and using this product. Some knowledge of UNIX or Linux-based systems would also be beneficial, for developing shell scripts and applications. Later versions of this document will be posted to the Axis Website, as required. See also the product's online help, available via the Web-based interface.

### Safety Notices Used In This Manual

**Caution!** - Indicates a potential hazard that can damage the product.

**Important!** - Indicates a hazard that can seriously impair operation.

Do not proceed beyond any of the above notices until you have fully understood the implications.

### Intellectual Property Rights

Axis AB has intellectual property rights relating to technology embodied in the product described in this document. In particular, and without limitation, these intellectual property rights may include one or more of the patents listed at <http://www.axis.com/patent.htm> and one or more additional patents or pending patent applications in the US and other countries.

### Legal Considerations


Camera surveillance can be prohibited by laws that vary from country to country. Check the laws in your local region before using this product for surveillance purposes.

### Electromagnetic Compatibility (EMC)

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: Re-orient or relocate the receiving antenna. Increase the separation between the equipment and receiver. Connect the equipment to an outlet on a different circuit to the receiver. Consult your dealer or an experienced radio/TV technician for help. Shielded (STP) network cables must be used with this unit to ensure compliance with EMC standards.

**USA** - This equipment has been tested and found to comply with the limits for a Class B computing device pursuant to Subpart B of Part 15 of FCC rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case the user at his/her own expense will be required to take whatever measures may be required to correct the interference.

**Europe** -  This digital equipment fulfills the requirements for radiated emission according to limit B of EN55022/1998, and the requirements for immunity according to EN55024/1998 residential, commercial, and light industry.

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### Support Services

Should you require any technical assistance, please contact your Axis reseller. If your questions cannot be answered immediately, your reseller will forward your queries through the appropriate channels to ensure a rapid response. If you are connected to the Internet, you can:

- download user documentation and firmware updates
- find answers to resolved problems in the FAQ database. Search by product, category, or phrases
- report problems to Axis support staff by logging in to your private support area
- visit the Axis Support Web at [www.axis.com/techsup/](http://www.axis.com/techsup/)

### Safety Notice - Battery Replacement

The AXIS 241Q/241S uses a 3.0V CR2032 Lithium battery as the power supply for its internal real-time clock (RTC). This battery will, under normal conditions, last for a minimum of 5 years. Low battery power affects the operation of the RTC, causing it to reset at every power-up. A log message will appear when battery replacement is required.

The battery should not be replaced unless required! If the battery does need replacing, please observe the following points:

#### Caution!

- Danger of Explosion if battery is incorrectly replaced
- Replace only with the same or equivalent battery, as recommended by the manufacturer.
- Dispose of used batteries according to the manufacturer's instructions.

AXIS 241Q/241S User's Manual  
Dated: January 2004  
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Revision 1.00  
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## Product Description

The AXIS 241Q/S is a new generation, full-featured video server for security surveillance and remote monitoring needs, based around the new AXIS ARTPEC-2 compression chip. It has the ability to digitize up to 4 analog video sources and make these available on the network as streams of real time full frame rate Motion JPEG video.

The AXIS 241Q is equipped with 4 BNC inputs for analog video devices and the AXIS 241S is equipped with 1 BNC input and a matching loop-through output. The AXIS 241S can also accommodate Y/C video using an Y/C to BNC cable (not included). The AXIS 241Q/241S is equipped with RS232 and 485 ports for connection of third party PTZ systems and 4 alarm inputs and 4 alarm outputs, which can be connected to various third party devices, e.g. door sensors and alarm bells. Up to 20 viewers can access the unit simultaneously.

Video can be viewed in 10 resolutions (up to 768x576), each with 5 quality levels. The video server contains Video Motion Detection, which allows the unit to trigger on activity in the video image, and advanced scheduling tools which can also be used to trigger an event. As the AXIS 241Q/241S is designed for use in security systems, it is equipped with several security features, such as IP address filtering, multilevel password and HTTPS.

The AXIS 241Q/241S has a built-in Web server, providing full access to all features through the use of a standard Web browser. The built-in script tool allows basic applications to be created, providing basic surveillance solutions. For advanced functionality, the video server is easy to integrate through the use of AXIS HTTP API (more info on [www.axis.com/developer](http://www.axis.com/developer))

## Hardware Inventory

Check the items supplied with your AXIS 241Q/241S against the following list:

Item	Title/Variants
Video Server	AXIS 241Q
	AXIS 241S
This document	AXIS 241Q/241S User's Manual
Warranty Document	
Power Supply PS-K	Europe
	UK
	Australia
	USA/Japan Korea
Terminal Connector	12 PIN
Mounting Kit	
Optional Accessories	ACC Y/C TO BNC CABLE (AXIS 241S only) Part No. 21339

The power supply is country specific, please check that the type of power supply you are using is correct.

## AXIS 241Q Front Panel



**Indicators** - After completion of the startup and self test routines, the multi-colored Network, Status, Power Indicators flash as follows:

Network	Amber	Flashes for activity on a 10 Mbit/s network
	Green	Flashes for activity on a 100 Mbit/s network
	Red	Flashes rapid red for hardware error, together with the Status indicator
	None	No connection
Status	Green	Normal operation
	Amber	Flashes during reset to factory default or at firmware upgrade
	Red	Flashes rapid red for a hardware error, together with the Network indicator
Power	Green	Normal operation
	Amber	Flashes green/amber during upgrade

**DIP Switches** - A corresponding line termination switch for each of the supported video inputs. All units are shipped with the line termination enabled for each supported video input; that is, with the DIP switches set in the down-position.

**Note:** If the AXIS 241Q is to be connected in parallel with other equipment, disable the input termination by turning the corresponding DIP switch to the up-position (OFF). Failure to do this may cause reduced image quality.

**Control Button** - Press this button to restore the factory default settings, as described in *Resetting to Factory Default Settings, on page 38* or to install using AXIS Internet Dynamic DNS Service (page 13).

**Video Inputs** - Accommodates up to 4 separate video sources (VIDEO 1- VIDEO 4) simultaneously. Each supported video input is connected using a coax/BNC connector. Physical connections made using RG59 75 Ohm coax video cable have a recommended maximum length of 800 feet (250 meters).

## AXIS 241S Front Panel



**Indicators** - After completion of the startup and self test routines, the multi-colored Network, Status, Power Indicators flash as follows:

<b>Network</b>	Amber	Flashes for activity on a 10 Mbit/s network
	Green	Flashes for activity on a 100 Mbit/s network
	Red	Flashes rapid red for hardware error, together with the Status indicator
	None	No connection
<b>Status</b>	Green	Normal operation
	Amber	Flashes during reset to factory default or at firmware upgrade
	Red	Flashes rapid red for a hardware error, together with the Network indicator
<b>Power</b>	Green	Normal operation
	Amber	Flashes green/amber during upgrade

**DIP Switches** - the AXIS 241S is delivered configured for composite video input.

Switch	1	2	3	4
Description	75 ohm video in termination	75 ohm video out termination	connects video in and video out	Not used
Composite video input	on	off	on	n/a
Y/C video input	on	on	off	n/a

**Note:** If the AXIS 241S is to be connected in loop through with other equipment, disable the input termination by setting switch 1 to the up-position (OFF). Failure to do this may cause reduced image quality.

**Control Button** - Press this button to restore the factory default settings, as described in *Resetting to Factory Default Settings, on page 38* or to install using AXIS Internet Dynamic DNS Service. See "AXIS Internet Dynamic DNS Service" on page 13.

**Video Input** - Coaxial BNC connector supporting a single composite video source. The physical connection is made using RG59, 75 Ohm coax video cable with a recommended maximum length of 800 feet (250 meters).

**Note:** The AXIS 241S supports conversion between composite video and Y/C (s-video) using an Y/C to BNC cable.

**Video Output** - A single video loop-through (VIDEO OUT) connected in parallel with VIDEO IN and terminated with a coax/BNC connector. Allows direct connection of, e.g. an external monitor. Set dipswitch to OFF when in use.

## AXIS 241Q/241S Rear Panel



The Serial Number is located on the label on the underside of the unit.

**Power Supply Connector** - A single socket for connection of the PS-K power supply. The I/O Terminal Block provides an auxiliary connection point for DC power.

**I/O Terminal Block** - The I/O Terminal Block provides the physical interface to 4 digital transistor outputs, 4 digital inputs and an RS-485 interface. See *Unit Connections*, on page 39 for more information.

**Network Connector** - The AXIS 241Q/241S connects to the network via a standard RJ45 connector. Supporting NWAY, the AXIS 241Q/241S detects the speed of the local network segment (10BaseT/100BaseTX Ethernet).

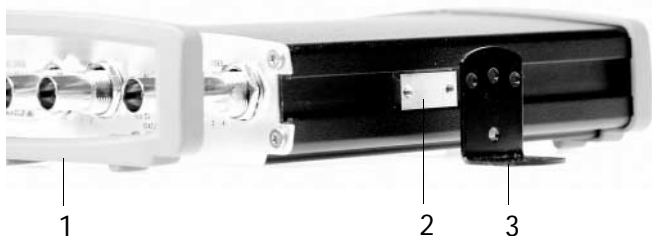
**RS-232 Serial Connector** - A 9-pin D-sub connector providing RS-232 serial connection. Typically used for Pan/Tilt device interface. See *Unit Connections*, on page 39 for more information.



# Installing the AXIS 241Q/241S

## Mounting the AXIS 241Q/241S

The AXIS 241Q/241S is supplied with a mounting kit for wall mounting or rack mounting. The mounting brackets can be positioned for mounting the video server on a vertical surface or in a rack (4U). Follow the instructions below to attach the mounting bracket to the video server:



1. Slide the grey frame off the front panel of the video server (no tools needed).
2. Insert the metal plates in the slots on each side of the video server.
3. Position and attach the brackets on each side using the provided screws.

## Connecting video cameras to the AXIS 241Q/241S

Connect the video output of your camera(s) to the AXIS 241Q/241S video server using a standard 75 Ohm coaxial video cable with BNC connectors.

Note: Use a RCA-to-BNC converter if your camera has a standard phono-type (RCA) connector.



## Installing on a network

The AXIS 241Q/241S is designed for installation on an Ethernet network. This involves assigning an IP address to the video server, either manually or via an automated network service (DHCP). Select one of the following procedures depending on your network:

- *Manual Installation using AXIS IP Utility*, on page 10
- *Manual Installation using ARP and Ping in Windows*, on page 11
- *Manual Installation using ARP and Ping in UNIX/Linux*, on page 12
- *AXIS Internet Dynamic DNS Service*, on page 13

Notes:

- The AXIS 241Q/241S has a default IP address - 192.168.0.90
- DHCP is enabled by default
- UPnP is enabled by default (see *UPnP*, on page 36)

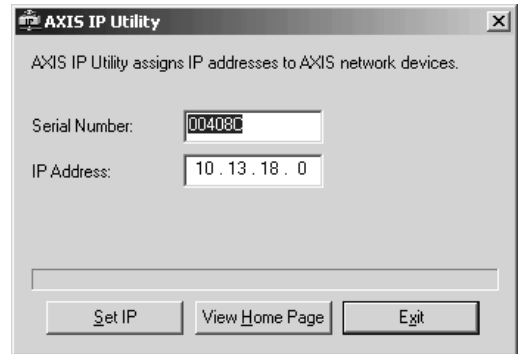
## Manual Installation using AXIS IP Utility

AXIS IP Utility is a Windows software application that installs the AXIS 241Q/241S to your local network using a static IP address.

- Download the AXIS IP Utility software to your computer, free of charge from the Support pages at <http://www.axis.com/techsup/software>
- Double-click the setup.exe file and follow the on-screen instructions to install the software on your computer.

Follow these instructions to set the IP address manually using AXIS IP Utility:

1. Acquire an unused IP address for your AXIS 241Q/241S.  
(AXIS IP Utility detects the subnet your computer is connected in. The AXIS 241Q/241S must be installed on the same subnet).
2. Connect a standard RJ-45 network cable to your AXIS 241Q/241S and connect it to the network.
3. Connect the power to the AXIS 241Q/241S.
4. Start AXIS IP Utility on your computer.
5. Enter the serial number:



The serial number/MAC address (S/N) is located on the label on the underside of the AXIS 241Q/241S

6. Enter the IP address acquired for your AXIS 241Q/241S and click **Set IP**.
7. When prompted by AXIS IP Utility, restart the video server by disconnecting and reconnecting the external power supply.
8. A message confirming that the IP address has been set will be displayed, click **OK**.
9. Click **View Home Page** to access the AXIS 241Q/241S Web pages.
10. Enter a password for the root user (administrator).
11. If required, accept the installation of **AMC** onto your workstation.

**Note:** AMC must be installed to view live images in Microsoft Internet Explorer. If your working environment restricts additional software components, you can configure your AXIS 241Q/241S to use a Java applet for updating the images. See the help file under **Live View Config | Layout | Default Viewer for Internet Explorer**. Or use another supported Web browser, see *Technical Specifications*, on page 47.

12. The installation is now complete, proceed to *Using the video server*, on page 14.

## Manual Installation using ARP and Ping in Windows

Assign your product with a unique IP address from a computer on your network, as follows:

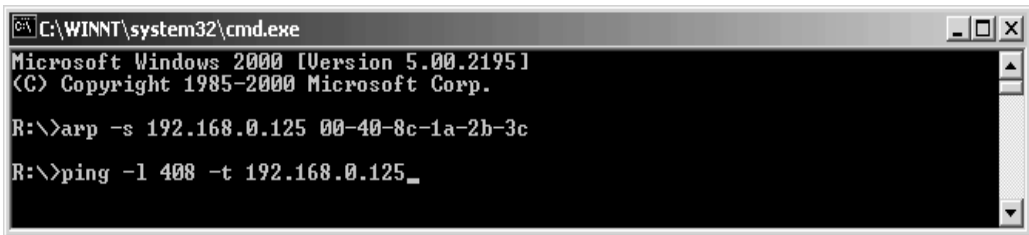
1. Acquire an unused IP address for the AXIS 241Q/241S from your network administrator.
2. Connect a standard network cable to your AXIS 241Q/241S and connect it to the network.
3. Locate the serial number/MAC Address (S/N) found on the label on the underside of the AXIS 241Q/241S.
4. From a computer on your network, open a Command Prompt, i.e. from the Windows Start menu, select Run... and type cmd in the field. Click OK.
5. Enter the commands:

Syntax:

```
arp -s <IP address> <MAC address>
ping -l 408 -t <IP address>
```

**Note:** The ping command is followed by -l (lower case L)

### Example



6. Connect the power to the AXIS 241Q/241S.
7. When 'Reply from 192.168.0.125: ...' is displayed (approximately 10-15 seconds), type Ctrl+C to close the ARP Ping session.
8. Start a Web browser and enter the IP address in the Address/Location field.
9. Press Enter.
10. Enter a password for the root user (administrator).
11. If required, accept the installation of AMC onto your workstation.

Note: AMC must be installed to view live images in Microsoft Internet Explorer. If your working environment restricts additional software components, you can configure your AXIS 241Q/241S to use a Java applet for updating the images. See the help file under Live View Config | Layout | Default Viewer for Internet Explorer for information. Or use another supported Web browser, see *Technical Specifications*, on page 47.

12. The installation is now complete, proceed to *Using the video server*, on page 14.

## Manual Installation using ARP and Ping in UNIX/Linux

Assign your product with a unique IP address from a computer on your network, as follows:

1. Acquire an unused IP address for the AXIS 241Q/241S from your network administrator.
2. Connect a standard network cable to your AXIS 241Q/241S and connect it to the network.
3. Locate the serial number/MAC Address (S/N) found on the label on the underside of the AXIS 241Q/241S.

Syntax:

```
arp -s <IP Address> <MAC Address> temp  
ping -s 408 <IP address>
```

Example:

```
arp -s 192.168.0.125 00:40:8c:18:10:00 temp  
ping -s 408 192.168.0.125
```

4. Connect the power to the AXIS 241Q/241S.
5. Close the ARP Ping session once 'Reply from 192.168.0.125: ...' (or similar) is displayed (approximately 10-15 seconds).
6. Start a Web browser and enter the IP address in the Address/Location field.
7. Press Enter.
8. Enter a password for the root user (administrator).
9. The installation is now complete, proceed to *Using the video server*, on page 14.

## AXIS Internet Dynamic DNS Service

AXIS Internet Dynamic DNS Service provides a one-click procedure that makes the AXIS 241Q/241S available on your local network and over the Internet. On installation, the AXIS 241Q/241S will receive a URL (web address), which can then be used to access it. The video server can be unregistered from the service at any time.

Please visit [www.axiscam.net](http://www.axiscam.net) for more details on AXIS Internet Dynamic DNS Service.

### Requirements

To use the AXIS Internet Dynamic DNS Service the following is required:

- A DHCP server connected to the network
- An Internet connection that does not require a proxy server for HTTP access.

### Installation Procedure

Please note that this procedure will send the AXIS 241Q/241S's IP address, firmware version, product type and serial number to the Axis Internet Dynamic DNS Service. No personal information will be transferred.

1. Connect the AXIS 241Q/241S to your local network, using a standard (RJ-45) network cable.
2. Connect the power to the video server.
3. Wait for the Status indicator on the front of the video server to show a steady green, whereupon it will have received a dynamic IP address from a DHCP server on your network.
4. Wait 60 seconds and push the control button on the front panel once. The Status indicator on the front of the video server will blink green while it connects to the AXIS Internet Dynamic DNS service. When the registration process is complete, the indicator will return to steady green.
5. Visit [www.axiscam.net](http://www.axiscam.net) where you will be guided through the remainder of the installation. Please have the serial number of your product ready and follow the instructions on the screen.

The serial number/MAC address (S/N) is located on the label on the underside of the AXIS 241Q/241S

6. Enter a password for the root user (administrator).
7. If required, accept the installation of **AMC** onto your workstation.

**Note:** AMC must be installed to view live images in Microsoft Internet Explorer. If your working environment restricts additional software components, you can configure your AXIS 241Q/241S to use a Java applet for updating the images. See the help file under Live View Config | Layout | Default Viewer for Internet Explorer for information. Or use another supported Web browser, see *Technical Specifications*, on page 47.

8. The installation is now complete, proceed to *Using the video server*, on page 14.

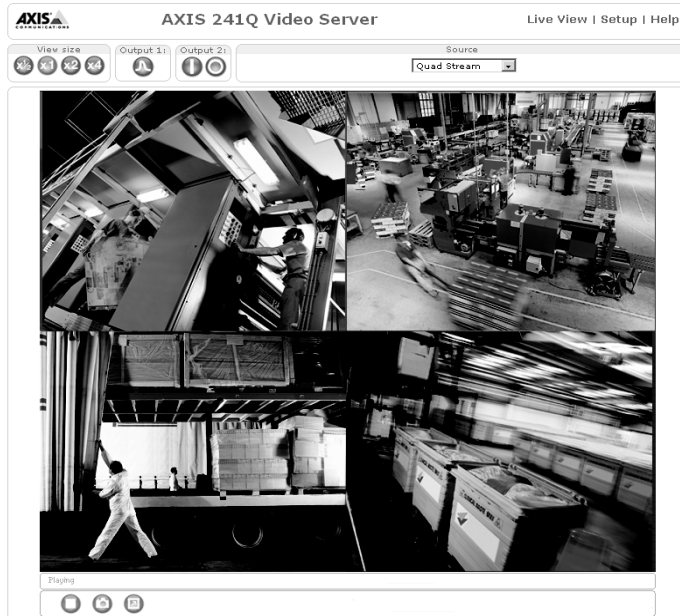
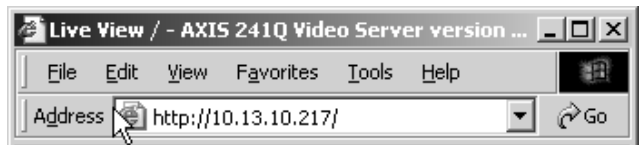
## Using the video server

The AXIS 241Q/241S can be used with most standard operating systems and supports Microsoft Internet Explorer 5.x or later, Netscape 7.x or later and Mozilla 1.4 or later

**Note:** To be able to view streaming video in Microsoft Internet Explorer, you must set your Web browser to allow ActiveX controls and also allow that AXIS Media control (AMC) is installed on your workstation. If your working environment restricts the use of additional software components, you can configure the AXIS 241Q/241S to use a Java applet for updating images. Please refer to the online help files for more information.

### Accessing the video server

1. Start a Web browser (Netscape Navigator, Internet Explorer, Mozilla).
2. Enter the IP address or host name of the AXIS 241Q/241S in the Location/Address field of your Web browser.
3. Enter the user name and password set by the administrator.
4. A video image is displayed in your Web browser.



**Note:** User functions in the AXIS 241Q/241S may have been customized to meet the specific requirements of the application. Consequently, many of the examples and functions in this section may differ from those displayed in your Live View page.

If the AXIS 241Q/241S has been customized, the buttons described below will be displayed accordingly on the Live View page. The following provides an overview of each button:



To resize the displayed image, click the **View Size** buttons: half-size ( $x_{1/2}$ ), full-size ( $x_1$ ),  $x_2$  or  $x_4$ . This will not change the resolution of the image (not available in Sequence Mode).

The **Output** buttons control an output directly from the Live View page. These buttons are configured under **Setup | Live View Config | Layout**.



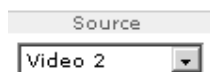
**Pulse** - click this button to activate the port for a defined period of time, e.g. to switch on a light for 20 seconds.



**Active/Inactive** - click these buttons to manually start and stop a connected device, e.g. switch a light on/off.



These buttons start/stop the **Sequence Mode**. This mode is created in **Setup | Live View Config | Sequence mode** and automatically displays the view from 2 or more video sources at set intervals.



From the **Source** list, select the desired video image(s). The list can contain Internal video sources, Quad stream view (AXIS 241Q only), External video sources. The **Quad Stream** option displays all four video images in one stream (AXIS 241Q only).



The **Action** buttons trigger an action directly from the Live View page. These buttons are configured under **Setup | Live View Config | Layout**. Click these buttons to manually start and stop events.



Use the **Snapshot** button to capture a snapshot of the image currently being displayed in the window. Right-click on the image to save it in JPEG format on your computer.

The **AMC viewer toolbar** (AXIS Media Control) is available from **Microsoft Internet Explorer only** and displays the following buttons:



The **Play/Stop** buttons start and stop the live video stream.



The **Snapshot** button takes a snapshot of the currently displayed image. The Snapshot function and the target directory for saving snapshots can be configured from AMC (AXIS Media Control), which is available from the Windows Control Panel (Internet Explorer only).



Click the **View Full Screen** button and the video image will fill the entire screen area. No other windows will be visible. Press Esc (Escape) on the computer keyboard to cancel full screen view.

## Pan/Tilt/Zoom controllers:

(only available if there is a PTZ camera and driver configured)

The screenshot displays the AXIS 241Q Video Server interface. At the top, it shows the AXIS logo, the title "AXIS 241Q Video Server", and navigation links for "Live View | Setup | Help". Below the title bar are several control panels: "View size" with zoom icons (x0.5, x1, x2, x4), "Output 1:" and "Output 2:" with camera icons, a "Source" dropdown menu set to "Video 1", "Trigger 1" with a camera icon, and "Snapshot" with a camera icon. The main area features a live video feed of a factory floor. To the right of the feed is a vertical "TILT" slider with "Up" and "Down" arrows. Below the feed are four horizontal sliders for "PAN Left/Right", "IRIS Close/Open", "FOCUS Near/Far", and "ZOOM Wide/Tele", each with "Auto" buttons. At the bottom, a "PTZ Control Queue" section contains fields for "Status in queue:" (showing "Not in queue"), "Position in queue:", and "Time remaining:" (showing "seconds"), along with a "Request control" button.

Depending on the uploaded PTZ driver, the Live View page will display the available Pan/Tilt/Zoom controllers. The administrator can also enable/disable the controller for specified users.

## Pan/Tilt/Zoom Control Queue:

This area indicates that the video source supports queues. This means that the time the user is in control of the PTZ settings is limited and that a queue of users has been set up. Use the buttons to request or release control of the Pan/Tilt/Zoom controllers.



# Configuring the video server

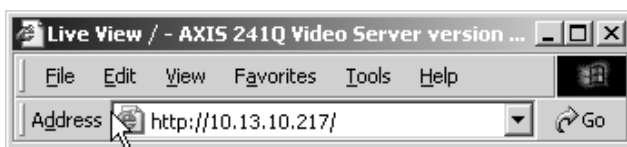
This section describes how to configure the AXIS 241Q/241S and is intended for the product administrator who has unrestricted access to all Setup tools and Operator who has access to Video & Image, Live View Config and Event Configuration.

The AXIS 241Q/241S is configured under Setup from a standard browser (see *Supported Web Browsers*, on page 47).

## Accessing the Setup tools

Follow the instructions below to access the Setup Tools from a Web browser.

1. Start the Web browser and enter the IP address or domain name of the AXIS 241Q/241S in the location/address field.



2. The Live View page is now displayed. Click Setup to display the Setup configuration tools.

## Overview of the Setup tools

The screenshot shows the "AXIS 241Q Video Server" web interface. The top right corner has links for "Live View | Setup | Help". A callout box labeled "Setup configuration" with an arrow points to the "Setup" link. The main content area is titled "Basic Configuration" and contains the following text:

Before using the AXIS 241Q Video Server, there are certain settings that should be made. Most of these require Administrator access privileges. The shortcuts 1 - 4 in the menu to the left provide a convenient way of quickly making these settings.

These basic settings are also available from the standard setup tools. For more information, see the online help available at the top right of the page.

Note that the only required setting is the IP Address, which is set on the TCP/IP page. All other settings are optional.

**Software version:** AXIS 241Q Video Server version 4.00

The left sidebar contains a navigation menu with the following items:

- Basic Configuration
  - Instructions
    1. Users
    2. TCP/IP
    3. Date & Time
    4. Video & Image
- Video & Image
- Live View Config
- Event Configuration
- System Options

## Basic Configuration

The links under Basic Configuration are shortcuts providing a convenient way to make the necessary basic settings the first time the unit is configured.

Tools	Settings / Options / Description
Instructions	General Instructions
Users	See <a href="#">System Options</a>   <a href="#">Security</a>   <a href="#">Users</a> below
TCP/IP	See <a href="#">System Options</a>   <a href="#">Network</a>   <a href="#">TCP/IP</a> below.
Date & Time	See <a href="#">System Options</a>   <a href="#">Date &amp; Time</a> below
Video & Image	See <a href="#">Video &amp; Image</a>   <a href="#">Video 1-4</a> below

## Video & Image (Administrator/Operator)

Tools	Settings / Options / Description
Video 1 Video 2 Video 3 Video 4	Image Settings Basic image settings; Resolution, compression, color settings, rotate image. Overlay settings places an overlay (e.g. a logo) in the video image. Video stream - setting to limit the video stream display time.
(AXIS 241S - 1 video source)	Video Source Settings Settings to modify the horizontal and vertical synchronization for the image from the equipment connected to the AXIS 241Q/241S Select physical connector (BNC or Y/C) ( <i>AXIS 241S only</i> )
Quad Stream (AXIS 241Q only)	Quad Stream Settings Quad Stream displays all four video streams in one stream. Available Image Settings; Resolution, Compression and Color Settings apply to all four images.
Overlay Image	An overlay image is, e.g. a company logo added to the video image. From this page you can upload images to use for all video sources.

## Live View Config (Administrator/Operator)

Tools	Settings / Options / Description
Layout	Customize the features, add custom links, manual trigger buttons and manual output control buttons to the Live View page. Default Viewer: set your preferred method of viewing moving images.
HTML Examples	Add live video from your AXIS 241Q/241S Video Server to your own Web site or save an HTML page on your local hard disk to display live images from the AXIS 241Q/241S.
External Video	Display live video from an external video source i.e. from another device accessible over the network.
Sequence Mode	Configure the video server to automatically display the available video sources at regular intervals. The images can be displayed in order or randomly. The time interval can be set to up to 59 minutes.


## Event Configuration (Administrator/Operator)

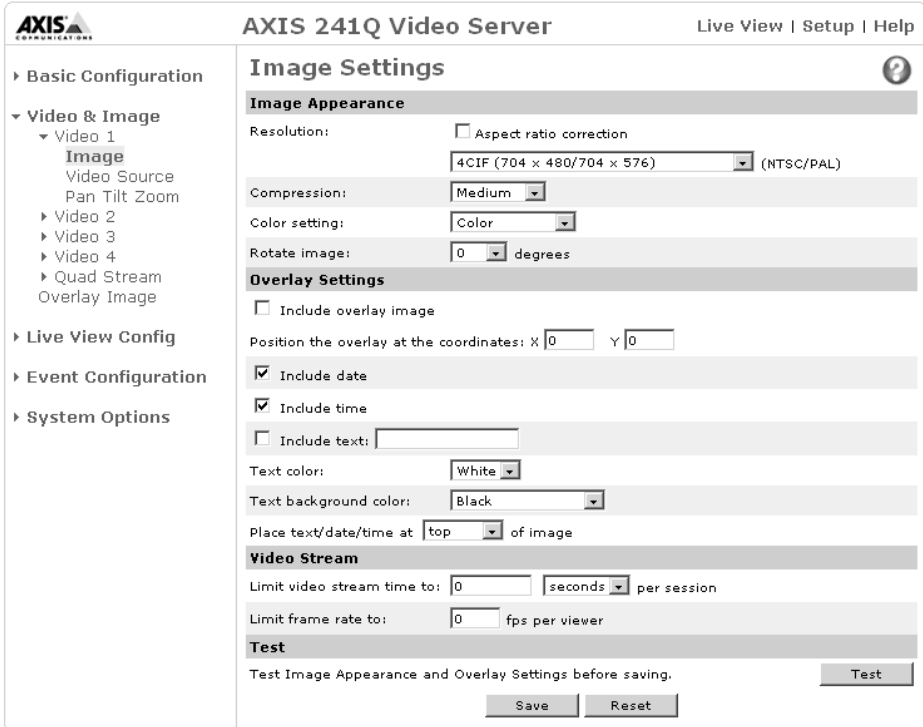
Tools	Settings / Options / Description
Instructions	General Instructions
Event Servers	Specify destinations for uploaded image files and/or notification messages from the video server. FTP servers and HTTP servers are intended for saving image files and HTTP servers and TCP servers are intended for receiving notification messages.
Event Types	Set the video server to act on Triggered or Scheduled Event Types, e.g. to upload images to a specified destination when an alarm is activated or at a set time.
Motion Detection	Video 1 - 4 Set up areas within each image where an alarm is activated whenever movement occurs in the image. Each motion detection window can be moved, re-sized, or disabled at any time. The behavior for each window is defined by adjusting the Object size, History, and Sensitivity profile sliders. Exclude windows can be used to block areas that are not to activate alarms.
Port Status	Shows the status for the video server's inputs and outputs - see <a href="#">Ports &amp; Devices</a> under <a href="#">System Options</a> .

## System Options (Administrator)

Tools	Settings / Options / Description	
Security	Users	Access to the video server can be restricted to defined users only (maximum of 20). The administrator has unrestricted access to the Setup tools and determines rights for users at 3 levels; Administrator, Operator, Viewer.
	IP Address Filter	Once enabled, only the IP addresses shown in the list of allowed addresses will be permitted to access the Video Server. All others will be blocked.
	HTTPS	The AXIS 241Q/241S can be configured for use over HTTPS which provides encrypted Web pages.
Date & Time	Define the date and time settings for your Video Server, manually or automatically.	
Network	TCP/IP	Specify IP address configuration, DNS configuration, Host Name configuration, Notification of changed IP address. Register/unregister for AXIS Internet Dynamic DNS Service. Specify HTTP port and network traffic preferences.
	SOCKS	Specify SOCKS server to use when communicating with hosts on the other side of a firewall/proxy server.
	SMTP	Specify the host names or addresses for your primary and secondary mail servers in the fields provided to allow the video server to send event and error email messages to predefined email addresses.
	UPnP	The video server includes support for Universal Plug and Play (UPnP). Enable UPnP (enabled by default) and enter a user friendly name for the video server.
Ports and Devices	I/O Ports	Configure the Video Server's 4 inputs and 4 outputs. Enter descriptive names for the ports and specify their Normal state (Open circuit or Grounded circuit).
	RS232	Select desired operational mode for the COM port: Generic TCP/IP, Generic HTTP, Pan/Tilt/Zoom controller.
	RS485	Selecting Pan Tilt Zoom enables the port to be used for controlling a connected PTZ device. Basic serial port settings can be adjusted by clicking the Port Options button.
Maintenance	Video Server	Maintenance functions to restart the video server, restore settings, upgrade the video server, backup the video server's parameter and restore to previous settings.
Support	Support Overview	Troubleshooting guide, generate server report (always attach the Server Report when contacting your support channel). Axis Support Services information.
	Logs & Reports	Generate Logs (all log information is shown in one file), Reports (important information about the server's status) and a parameter list (the unit's parameters and current settings).
	About	Link to the source code for the Linux kernel, Boa and more.
Advanced	Scripting	This powerful function allows users to customize and use their own scripts to create specialized applications.
	Plain Config	Plain config allows direct access to all the configurable parameters.

## Using the Setup Tools

The following descriptions offer examples of the available features in the AXIS 241Q/241S. For details of each setting, please refer to the online help files which are available from each page. Click  to access the help files.



The screenshot shows the configuration interface for the AXIS 241Q Video Server. The left sidebar contains a navigation menu with the following items: Basic Configuration, Video & Image (expanded), Live View Config, Event Configuration, and System Options. Under Video & Image, the sub-items are Video 1, Image (selected), Video Source, Pan Tilt Zoom, Video 2, Video 3, Video 4, Quad Stream, and Overlay Image.

The main content area is titled "AXIS 241Q Video Server" and includes "Live View | Setup | Help" links. The "Image Settings" section is active, featuring a help icon. It is divided into three main sections:

- Image Appearance:**
  - Resolution:  Aspect ratio correction, 4CIF (704 x 480/704 x 576) (NTSC/PAL)
  - Compression: Medium
  - Color setting: Color
  - Rotate image: 0 degrees
- Overlay Settings:**
  - Include overlay image
  - Position the overlay at the coordinates: X 0 Y 0
  - Include date
  - Include time
  - Include text: [text input]
  - Text color: White
  - Text background color: Black
  - Place text/date/time at top of image
- Video Stream:**
  - Limit video stream time to: 0 seconds per session
  - Limit frame rate to: 0 fps per viewer

At the bottom, there is a "Test" section with a "Test" button and a note: "Test Image Appearance and Overlay Settings before saving." Below this are "Save" and "Reset" buttons.

### Video 1(-4) Settings

Modify **Image Appearance** to optimize the video images according to your requirements.

All configuration of images and overlays will affect the performance of the video server depending on the usage and the available bandwidth.

- Lower compression improves image quality, but generates larger files
- Black & White uses less bandwidth than Color
- Rotating the image 90 or 270 degrees will lower the maximum frame rate

See the technical specifications - *Performance*, on page 48.

## Overlay Settings

Include an image, e.g. your company logo and date and time with your own text which is placed on one line at the top or bottom of the video image. To upload an overlay image, see *Overlay Image Settings*, on page 22.

An overlay image can be used to mask out parts of the video image, e.g. for privacy reasons.

**Example:** If there is information in a monitored area that you do not wish to disclose, you can mask it out by placing an overlay image on top. Setting the overlay image anywhere in the video image using coordinates allows precision detail masking.



## Video Stream

Define the maximum video stream time per session in seconds, minutes or hours. When the set time has expired, a new stream can be started by refreshing the page in the Web browser. For unlimited video stream time, set this value to 0.

The frame rate allowed to each viewer can be limited, to avoid bandwidth problems on the network. For a preview of the image and overlay settings before saving, click Test. When you are satisfied with the settings, click Save.

## Video Source Settings

Enter a descriptive name for the Video source. Also, eliminate black borders surrounding the image by adjusting the offset position.

### AXIS 241S only:

Select the physical connector the video source is connected to, BNC or Y/C. The AXIS 241S supports conversion between composite video and Y/C (s-video) using an ACC Y/C to BNC cable.

- BNC (composite video) connects a standard video camera or other video equipment
- Y/C (S-video) connects a Y/C (S-video) camera or other video equipment

## Quad Stream Settings (AXIS 241Q only)

The settings are the same as the individual image settings and are active only when the quad stream view is selected, see *Video 1(-4) Settings*, on page 20.

## Overlay Image Settings

An overlay image is an image included in the video image. This might, for example, be your own company logo.

Follow these instructions to upload and use an overlay image:

1. To upload the file (a logo or image) to the AXIS 241Q/241S, click the **Browse** button and locate it on your computer or server.
2. Click the **Upload** button and follow the on-screen instructions.
3. The image is now available in the **Use overlay image** drop-down list.
4. Click **Save**.

Overlay image requirements:

Image Formats	Image Size
<ul style="list-style-type: none"> <li>• Windows 24-bit BMP (full color)</li> <li>• Windows 4-bit BMP (16 colors)</li> <li>• OS/2 4-bit BMP (16 colors)</li> </ul>	The height and width of the overlay image in pixels must be exactly divisible by 4.

Overlay image limitations:

- If the image overlay and text overlay are larger than the video image, no overlay will be displayed. When also using a text overlay, this will occupy 16 pixels in height and as many in width as the video image. Please consider this when configuring the overlay image.
- If the overlay is initially positioned so that part of it is outside the video image, it will be relocated so that it appears over the video image, i.e. it is always the entire image that is displayed.
- The maximum overlay image size supported by the AXIS 241Q/241S is the same as the maximum image resolution. See Technical Specifications, on page 46.

Please use the online help files  for more information.

## Live View Config

You can customize the features on the AXIS 241Q/241S Live View page to suit your own requirements, or you can upload and use a custom web page.

This is done by the administrator from Setup | Live View Config | Layout. Click the radio button Use custom settings and click Configure

### Custom Settings ?

**Upload Own Web Files**

To upload or remove your own web files, click Upload/Remove... (administrator only)

**Modify the Axis Look**

Background color	<input checked="" type="radio"/> Default	<input type="radio"/> Own: <span style="border: 1px solid #ccc; padding: 2px;">White</span>
Text color	<input checked="" type="radio"/> Default	<input type="radio"/> Own: <span style="border: 1px solid #ccc; padding: 2px;">Black</span>
Background picture	<input checked="" type="radio"/> None	<input type="radio"/> Own: <span style="border: 1px solid #ccc; padding: 2px;">-----</span> <input type="radio"/> External: <span style="border: 1px solid #ccc; padding: 2px;">http://</span>
Banner	<input checked="" type="radio"/> None	<input type="radio"/> Own: <span style="border: 1px solid #ccc; padding: 2px;">-----</span> <input type="radio"/> External: <span style="border: 1px solid #ccc; padding: 2px;">http://</span>
Banner link	<input checked="" type="radio"/> None	<input type="radio"/> Own: <span style="border: 1px solid #ccc; padding: 2px;">http://</span>
Logo	<input checked="" type="radio"/> None <input type="radio"/> Default	<input type="radio"/> Own: <span style="border: 1px solid #ccc; padding: 2px;">-----</span> <input type="radio"/> External: <span style="border: 1px solid #ccc; padding: 2px;">http://</span>
Logo link	<input type="radio"/> None <input checked="" type="radio"/> Default	<input type="radio"/> Own: <span style="border: 1px solid #ccc; padding: 2px;">http://</span>
Title	<input type="radio"/> None <input checked="" type="radio"/> Default	<input type="radio"/> Own: <span style="border: 1px solid #ccc; padding: 2px;">Title text above image</span>
Description	<input type="radio"/> None <input checked="" type="radio"/> Default	<input type="radio"/> Own: <span style="border: 1px solid #ccc; padding: 2px;">Description text below image</span>

Show setup link\*

\* **Caution!** Unchecking the box for *Show setup link* will remove the setup link from the product's Home Page. The Setup Tools will then only be accessible by entering the full setup address into the address/URL field of a browser. The setup address for this product is `http://192.168.0.90/operator/basic.shtml`.

Preview

**Own Home Page**

Use own home page -----

OK
Cancel

The setup address is `http://<ip address>/operator/basic.shtml`.

### Upload Own Web Files

Your own web files, background picture, color etc. must first be uploaded to the AXIS 241Q/241S Video Server in order to be available for selection in the Custom Settings setup dialog. Once uploaded, the files are shown in the drop-down list.

1. Enter the path to the file, e.g. a file located on your workstation or click the Browse button.
2. Select the user level for the uploaded file. Setting the user access level means that you have complete control over which pages can be viewed by which users.

3. When the path is shown correctly in the text field, click the **Upload** button.

All uploaded files are shown in the list in the lower section of the page. To remove a file, check the box provided next to it and then click the **Remove** button.

- To use your uploaded file, click the radio button and select the file from the drop-down list by **Own**:
- To use an External file located somewhere other than in the AXIS 241Q, click the radio button and enter the URL by **External**:

### Own Home Page

To use a previously uploaded web page as the default page, check the checkbox, select the page from the drop-down list and click **OK**.

**User Defined Links** - enter a descriptive name and enter the URL in the provided field. The link will appear on the **Live View** page.

User defined CGI links can be used to issue HTTP API requests, e.g. PTZ commands.

Example:

1. Check **Show Custom Link 1**
2. Enter a descriptive name, e.g. **CAM1 Stop PTZ**.
3. Enter cgi link:  
`http://192.168.0.125/axis-cgi/com/ptz.cgi?camera=1&continuouspaniltmove=30,-30`
4. Check **Show Custom Link 2**.
5. Enter a descriptive name, e.g. **CAM2 Start PTZ**.
6. Enter cgi link:  
`http://192.168.0.125/axis-cgi/com/ptz.cgi?camera=1&continuouspaniltmove=0,0`
7. These links will appear in the web interface and can be used to control the PTZ camera

For more information on the Axis HTTP API, see the **Support / Developer** pages on the Axis Web site at <http://www.axis.com>.

**Action Buttons** - These buttons can then be used to manually trigger and stop an event from the **Live View** page. See *Event Servers*, on page 27

The snapshot button allows users to take a snapshot of the video stream and save it on a computer.




User Defined Links



**Output Buttons** - These buttons can then be used to manually start and stop an event from the Live View page, e.g. switch on/off a light:

- The Pulse button activates the port for a defined period
- Active/Inactive displays 2 buttons, one for each action (on/off)

**Default Viewer for your Browser** - select the appropriate radio button to define your method for viewing moving images depending on your Web browser and settings.

Please use the online help files  for details.

## HTML Examples

You can add live video from your AXIS 241Q/241S to your own web site. The video server can send Motion-JPEG to up to 20 simultaneous connections, although an administrator can restrict this to fewer.

Enter the **Image Type**, **Image size** and other settings to suit your Web page and click **Update**.

Copy the source code below and paste it into your own Web page code.

**Note:** The video stream in the HTML examples page is always from video source 1. If you wish to incorporate the video stream from another video source, e.g. video source 2, change the following line in the code:

```
Existing line:  
var File = "axis-cgi/mjpg/video.cgi?resolution=CIF&camera=1";  
change to:  
var File = "axis-cgi/mjpg/video.cgi?resolution=CIF&camera=2";
```

Please use the online help files  for more information.

## External Video

You can add links to other Axis network devices that are available over the network. These sources can be displayed in the interface the same as the video sources 1-4 that are connected to the AXIS 241Q/241S.

Click the **Add** button to open the External Video Source Setup dialog, which is used to make all the necessary settings.

**Example:**

```
http://192.168.0.125/axis-cgi/mjpeg/video.cgi
```

Please use the online help files  for more information.

## Sequence Mode

The live view page can be configured to rotate through selected internal and/or external video sources, in order or randomly.



Select the desired video sources and enter the time in seconds to display each source (up to 59 minutes). Click **Save**.

The Sequence buttons will appear on the Live View page to enable the viewer to start and stop the sequence mode.

Please use the online help files  for more information.

## Event Configuration


This section describes how to configure the AXIS 241Q/241S for alarm handling. The AXIS 241Q/241S can be configured to perform certain actions when certain types of events occur.

Event type	A set of parameters describing how and when the video server is to perform certain actions	
Triggered Event page 28	the circumstances that start an event	e.g. at a signal from an external device, such as a door switch or a motion sensor
Scheduled Event page 29	the circumstances that start an event	e.g. at a pre-programmed time
Action	what occurs when the event triggers	e.g. uploaded video images to an FTP server, email notification, etc.

## Event Servers

Event Servers are used, e.g. for receiving uploaded image files and/or notification messages. To set up Event server connections in your AXIS 241Q/241S, go to **Setup | Event Configuration | Event Servers** and enter the required information according to the selected server type.

Server type	Purpose	Requires information
FTP Server	<ul style="list-style-type: none"> <li>used for uploading saved images</li> </ul>	<ul style="list-style-type: none"> <li>Descriptive name of your choice</li> <li>User Name and Password (to FTP server)</li> <li>Upload path e.g. images/</li> <li>Port number e.g. port 21</li> <li>Use passive mode if there is a firewall between the video server and FTP server</li> </ul>
HTTP Server	<ul style="list-style-type: none"> <li>used for notification messages</li> <li>used for uploading saved images</li> </ul>	<ul style="list-style-type: none"> <li>Descriptive name of your choice</li> <li>URL</li> <li>User Name and Password (to HTTP server)</li> <li>Proxy address/Proxy port (if required)</li> <li>Proxy User Name and Password (if required)</li> </ul>
TCP Server	<ul style="list-style-type: none"> <li>used for notification messages</li> </ul>	<ul style="list-style-type: none"> <li>Descriptive name of your choice</li> <li>User Name and Password (to TCP server)</li> <li>Port number e.g. port 80</li> </ul>

For details on each setting, please refer to the online help files  which are available from each web page.

**Note:** Pre-trigger and Post-trigger buffers will be lost if the connection to the event server fails.

When the setup is complete, the connection can be tested by clicking the **Test** button (the connection test will take approximately 10 seconds).

## Event Types

An Event Type is a set of parameters describing how and when the video server is to perform certain actions.

**Example:** If somebody walks past the connected camera, and an event has been configured to act on this, the video server can e.g. record and save video images to an FTP server or send a notification email to a pre-configured email address with a pre-configured message. The video images can be sent as an attachment with the email.

Name	Status	Enabl.	Priority	Trig./Sched.	Actions*
New Event	Inactive	Yes	Normal	Manual	Fu
Scheduled up...	Inactive	No	Normal	Time frame	Fu
Scheduled up...	Inactive	No	Normal	Time frame	Fu
Test	Inactive	Yes	Normal	Manual	Fu
Watchdog	Active	No	Normal	Boot	0

\*Fu=FTP upload, Hu=HTTP upload, Eu=Email upload, O=Output port, En=Email notification, Hn=HTTP notification, Tn=TCP notification, P=PTZ preset.

### Triggered Event


A Triggered event is activated, e.g from:

- a switch (doorbell) connected to an input port on the video server
- detected movement in a configured motion detection window
- a lost signal from a video source
- a manually activated action e.g. from an action button in the web interface
- on restart (reboot) after e.g. power loss

### How to set up a triggered event

This example describes how to set the video server to upload images when the main door is opened:

1. Click **Add triggered** on the Event types page.
2. Enter a descriptive name for the event, e.g. Main door.
3. Set the **priority** - High, Normal or Low (see online help files).
4. Select which **Video Source** the event is to act on, e.g. Video 1 on Main door.
5. Set the **Respond to Trigger...** parameters when the event is to be active, e.g. only after office hours
6. Select the trigger alternative from the **Triggered by...** drop-down list, e.g. an Input port with a connected sensor if the door is opened.
7. Set the **When Triggered...** parameters i.e. set what the video server is to do if the main door is opened e.g. upload images to an FTP server.
8. Click **OK** to save the Event in the Event Types list.

Please use the online help files  for descriptions of each available option.

## Pre-trigger and Post-trigger buffers

This function is very useful when checking to see what happened immediately before and after a trigger, e.g. 2 minutes before and after a door has been opened. Check the **Upload images** checkbox under **Event Types | Add Triggered... | Triggered by...** to expand the web page with the available options.

**Buffer size** - AXIS 241Q - up to 36 MB buffer; AXIS 241S - up to 9 MB buffer.  
The maximum length of time of the pre-/post-buffer depends on the image size and selected frame rate.

**Include pre-trigger buffer** - images stored internally in the server from the time immediately preceding the trigger. Check the box to enable the pre-trigger buffer, enter the desired length of time and specify the required image frequency.

**Include post-trigger buffer** - contains images from the time immediately after the trigger. Configure as for pre-trigger.

**Note:** If the pre- or post-buffer is too large for the AXIS 241Q's internal memory, the frame rate will be reduced and individual images may be missing. If this occurs, an entry will be created in the unit's log file.

**Continue image upload (unbuffered)** - enable the upload of images for a fixed length of time. Specify the length of time for the uploaded recording, in seconds, minutes or hours, or for as long as the trigger is active. Finally, set the desired image frequency to the maximum (the maximum available) or to a specified frame rate. The frame rate will be the best possible, but might not be as high as specified, especially if uploading via a slow connection.

## Scheduled Event


A **Scheduled event** can be activated at pre-set times, in a repeating pattern on selected weekdays.

### How to set up a scheduled event

This example describes how to set the video server to send an email notification with saved images from at a set time:

1. Click **Add scheduled** on the **Event types** page.
2. Enter a descriptive name for the event, e.g. Scheduled email.
3. Set the **priority** (High, Normal or Low).
4. Select the **video source** i.e. which video the event is to act on, e.g. Video 2 in Storage room.
5. Set the **Activation Time** parameters (24h clock) when the event is to be active, e.g. start on Sundays at 13.00 with a duration of 12 hours.

6. Set the **When Activated...** parameters i.e. set what the video server is to do at the specified time e.g. send uploaded images to an email address.
7. Click **OK** to save the Event in the Event Types list.

Please use the online help files  for descriptions of each available option.

## Motion Detection

In the Motion Detection menu, you can configure Video 1-4 for motion detection. The motion detection feature is used to generate an alarm whenever movement occurs (or stops) in the image. Maximum of 40 Include/Exclude windows (AXIS 241Q). Maximum of 10 Include/Exclude windows (AXIS 241S).

- **Include windows** for targeting specific areas within the image
- **Exclude windows** are areas to be ignored within the Include window

Once configured, the Motion Detection windows will appear in a list when Motion Detection is selected to trigger an event. See *How to set up a triggered event* above.

**Note:** Using the motion detection feature may decrease overall performance in the video server.




### How to configure Motion Detection

This example describes how to configure Video 1 for motion detection:

1. Click **Motion Detection** in the Event Configuration menu.
2. Select the desired Video from the menu.
3. Click the **Configure Included Windows** radio button.

4. Click **New**.
5. Enter a descriptive name of your choice under **Windows name**.
6. Adjust the size (drag the bottom right-hand corner) and position (click on the text at the top and drag to the desired position).
7. Adjust the Object size, History and Sensitivity profile sliders (see table below for details). Any detected motion within an active window is then indicated by red peaks in the **Activity** window (the active window has a red frame).
8. Click **Save**.

If there are parts in the Include window that you wish to exclude, click the **Configure Excluded Windows** radio button and repeat steps 1-8 above.

Please use the online help files  for descriptions of each available option.

Parameter	Size	History	Sensitivity
High	Only very large objects trigger motion detection	An object that appears in the region will trigger the motion detection for a long period	Ordinary colored objects on ordinary backgrounds will trigger the motion detection
Low	Even very small objects trigger motion detection	An object that appears in the region will trigger motion detection for only a very short period	Only very bright objects on a dark background will trigger motion detection
Default values	Low	Medium to High	Medium to High

**Examples:**

- Avoid triggering on small objects in the image by selecting a high size level.
- To trigger motion detection as long as there is activity in the area, select a high history level.
- To reduce the number of tiggers if there is a lot of movement during a short period of time, select a high history level.
- To only detect flashing light, low sensitivity can be selected. In other cases, a high sensitivity level is recommended.

## Port Status

Under **Event Configuration | Port Status** there is a list that shows the status for the connected inputs and outputs of the AXIS 241Q/241S for the benefit of the Operator who cannot access the System Options section.

**Example:** If the Normal state for a doorbell push button connected to an input is set to **Open circuit** - as long as the button is not pushed, the state is inactive. If the doorbell button is pushed, the state of the input changes to active.

# System Options

---

## Security

User access control is enabled by default, the administrator sets the root password on first access. Other users are authorized with user names and passwords, or the administrator can choose to allow anonymous viewer login to the Live View page, as described below:

Users - the user list displays the authorized users and access levels:

Viewer	Provides the lowest level of access, which only allows the user access to the Live View page
Operator	An Operator can view the Live View page, create and modify event types and adjust certain other settings. The Operator does not have access to the Systems Options configuration pages.
Administrator	An administrator has unrestricted access to the Setup Tools and can determine the registration of all other users.

User Settings - check the corresponding checkboxes to enable:

- **Anonymous viewer login** - allows any viewer direct access to the Live View page.
- **Anonymous PTZ control login** - allows any viewer access to the Pan Tilt Zoom controllers on the Live View page (if Pan/Tilt/Zoom is available).

## IP Address Filter

The administrator can add up to 256 IP addresses to the **Allowed IP Addresses** list. If the IP address filtering checkbox is checked, the AXIS 241Q/241S will only allow access to requests coming from the IP addresses in the list.

The users from these IP addresses need to be specified in the user list with the appropriate access rights (**User**, **Operator** or **Administrator**).

**Referrals** - to prevent unauthorized sources from including the video stream from the AXIS 241Q/241S into external Web pages, check the Referrals checkbox and enter the IP address or Host name of the computer that hosts the Web pages with the included video stream. Several IP addresses/host names can be defined and are separated by semicolons(;




## HTTPS

HTTPS provides encryption for user page requests to and from the AXIS 241Q/241S. The AXIS 241Q/241S can be configured for use with HTTPS, as described below.

**Certificate** - to use HTTPS for communication with the AXIS 241Q/241S, a Certificate must be created using one of these methods:

- A self-signed certificate can be created in the video server but this can not guarantee the same level of security as an official certificate.
- An official certificate issued by a CA (Certificate Authority). A CA issues and manages security credentials and public keys for message encryption.
  1. Click either **Create self-signed certificate** or **Create Certificate Request** and enter the required information in the provided fields
  2. Click **OK**.
  3. **Create self-signed certificate** generates and installs a certificate which will be displayed under **Installed Certificate**.  
**Create Certificate Request** generates a PEM formatted request which you copy and send to a CA for signing. When the signed certificate is returned, click **Install signed certificate...** to install the certificate in the AXIS 241Q/241S.
  4. Set the **HTTPS Connection Policy** for the administrator, Operator and Viewer to enable HTTPS connection (set to HTTP by default)

Please refer to the home page of your preferred CA for information on where to send the request etc. For more information, please refer to the online help files 

## Date & Time

**Current Server Time** - displays the current date and time (24h clock). If this has not been configured, the time displayed is the default setting. The time can be displayed in 12h clock format in the Overlay Images (see below).

**New Server Time** - Select your time zone from the drop-down list and check the daylight saving time changes, if desired.


From the **Time Mode** section, select the preferred method to use for setting the time:

- **Synchronize with computer time** - sets the time from the clock on your computer.
- **Synchronize with NTP Server** - the video server will obtain the time from an NTP server every 60 minutes. Specify the NTP server's IP address or host name.

**Note:** Note that if using a host name for the NTP server, a DNS server must be configured under TCP/IP settings. See **Network | TCP/IP** below.

- **Set manually** - this option allows you to manually set the time and date.

**Date & Time Format Used in Images** - specify the formats for the date and time (12h or 24h) displayed in the Live View video streams.

Use the predefined formats or use your own custom date and time formats. See **Advanced File Naming & Date/Time Formats** in the help files  for information on how to create your own file formats.

## Network - TCP/IP Settings

### IP Address Configuration

The IP address of the video server can be set automatically via DHCP, or a fixed IP address can be set manually. A host name can be used and there are options for setting up notification of changes in the IP address. DHCP is enabled by default.

**Note:** DHCP is a protocol for automatic IP address assignment on a network. IP address assignment via DHCP may lead to the situation where the IP address is changed and you lose contact. Configure the **options for notification of IP address change** (under Services) to receive notification from the video server, when the IP address has been changed.

Alternatively, if your DHCP server can update a DNS server, you can access the AXIS 241Q/241S by host name which is always the same, regardless of the IP address.

**Auto-Configure Link-Local Address** is enabled by default and assigns the AXIS 241Q/241S with an additional IP address for the UPnP protocol. The AXIS 241Q/241S can have both a Link-Local IP and a static/DHCP-supplied IP address at the same time - these will not affect each other. See *UPnP*, on page 36.

### DNS Configuration

DNS (Domain Name Service) provides the translation of host names to IP addresses on your network.

**Obtain DNS server address via DHCP** - automatically use the DNS server settings provided by the DHCP server. Click the **View** button to see the current settings.

Use the following DNS server address - enter the desired DNS server by specifying the following:

**Domain name** - enter the domain(s) to search for the host name used by the AXIS 241Q/241S. Multiple domains can be separated by semicolons (;). The host name is always the first part of a Fully Qualified Domain Name, e.g. **myserver** is the host name in the Fully Qualified Domain Name **myserver.mycompany.com** where **mycompany.com** is the Domain name.

**Primary DNS server** - enter the IP address of the primary DNS server.

**Secondary DNS server** - will be used if the primary DNS server is unavailable.

## Host Name Configuration

The AXIS 241Q/241S can be accessed using a host name, instead of an IP address. The host name is usually the same as the assigned DNS Name. It is always the first part of a Fully Qualified Domain Name and is always one word, with no period. For example, myserver is the host name in the Fully Qualified Domain Name myserver.mycompany.com.


For more information, please refer to the online help files 

## Services

**Options for notification of IP address change** - if the IP Address for the video server is changed automatically, e.g. by DHCP, you can choose to be notified. Click **Settings...** and enter the required information.

**AXIS Internet Dynamic DNS Service** - If the AXIS 241Q/241S Video Server has been registered with the Axis Internet Dynamic DNS service and the IP address for the product changes, the service is updated to reflect the change. Check the box to enable/disable automatic updates.

The domain name currently registered at the Axis Internet Dynamic DNS service for your product can at any time be removed. To do this click **Settings...** and follow the instructions.

For more information, please refer to the online help files 

## HTTP

The default HTTP port number (port 80) can be changed to any port within the range 1024-65535. This is useful for e.g. simple security port mapping.

## Network Traffic

The default setting is **Auto-negotiate** which means that the correct speed is automatically selected. If necessary, you can set the connection speed by selecting it from the drop-down list. 10BaseT (Half/Full Duplex), 100BaseTX (Half/Full Duplex).

**Maximum bandwidth** - Specify, in Mbit/s or kbit/s, the maximum bandwidth that the video server is allowed to use on your network. This is a useful function when connecting your video server to busy or heavily loaded networks. The default setting is **Unlimited**.

For more information, please refer to the online help files 

## SOCKS

SOCKS is a networking proxy protocol. The AXIS 241Q/241S can be configured to use a SOCKS server to reach networks on the other side of a firewall/proxy server. This functionality is useful if the video server is located on a local network behind a firewall, but notifications, uploads, alarms, etc., need to be sent to a destination outside the local network (e.g. to the Internet).

## SMTP (email)

(Simple Mail Transfer Protocol) Enter the host names or addresses for your primary and secondary mail servers in the fields provided to enable event and error email messages from the video server to predefined addresses, via SMTP.

## UPnP

(Universal Plug and Play) The video server includes support for Universal Plug and Play (UPnP) in Windows Millennium and Windows XP. UPnP is enabled by default.

**Note:** UPnP must be installed on your workstation. To do this, open the Control Panel from the Start Menu and select **Add/Remove Programs**. Select **Add/Remove Windows Components** and open the **Networking Services** section. Click **Details** and then select **UPnP** as the service to add.

## Ports & Devices

I/O Ports - the pinout, interface support and the control and monitoring functions provided by this connector are described in *Unit Connections*, on page 39.

## Maintenance

- **Restart** - The unit is restarted without changing any of the settings. Use this method if the unit is not behaving as expected.
- **Restore** - The unit is restarted and most current settings are reset to factory default values. The settings that will not be reset are as follows:
  - the boot protocol (DHCP or static)
  - the static IP address
  - the default router
  - the subnet mask
  - the system time
- **Factory Default** - The Factory default button should be used with caution. Pressing this button will return all of the video server's settings to the factory default values (including the IP address)

**Upgrade Server** - See *Updating the Firmware*, on page 44.

**Backup** - To take a backup of all of the parameters, and any user-defined scripts, click the **Backup** button. If necessary, it is then possible to return to the previous settings if the settings are changed and there is unexpected behavior.

**Restore** - click the **Browse** button to locate the saved backup file (see above) and then click the **Restore** button. The settings will be restored to the previous configuration.

**Note:** Backup and Restore can only be used on the same unit running the same firmware. This feature is not intended for multi-configurations or for firmware upgrades.

## Support

The **support overview** page provides valuable information on troubleshooting and contact information, should you require technical assistance.

**Logs & Reports** - when contacting Axis support, please be sure to provide a valid Server Report with your query.

**View Information** - The Log report and the Parameter List also provide valuable information for troubleshooting and when contacting Axis' support service.

### Configuration:

**Log Level for Log Files** - from the drop-down list, select the level of information to be added to the Log file

**Log Level for Email** - from the drop-down list, select the level of information to send as email and enter the destination email address.

## Advanced

Scripting is an advanced function that allows the possibility to customize and use scripts. This function is a very powerful tool.

### Caution!

Improper use may cause unexpected behavior or even cause loss of contact with the unit. If a script does cause problems, reset the unit to its factory default settings (in which case, a backup file may be of use to return the unit to its latest configuration). **Axis strongly recommends that you do not use this function unless you fully understand the consequences.** Note that Axis' support will not assist with customized scripts.

For more information, please visit the Developer pages at <http://www.axis.com/developer>

**Plain Config** - this function is for the advanced user with experience from Axis video server configuration. All parameters can be set and modified from this page, help is available from the standard help pages.

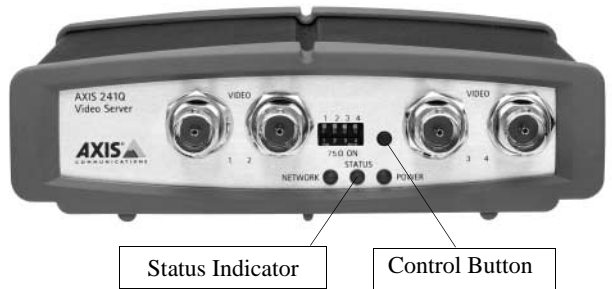
## Resetting to Factory Default Settings

To reset the AXIS 241Q/241S to the original default settings, go to the **System Options | Maintenance** web page (described in *Maintenance*, on page 36) or use the control button on the AXIS 241Q/241S as described below:

### Using the Control Button

Follow the instructions below to reset the AXIS 241Q/241S to factory default settings using the Control Button.

1. Switch off the AXIS 241Q/241S by disconnecting the external power supply.
2. Using a suitably pointed object, press and hold the Control button while you reconnect the power supply.
3. Keep the Control button pressed until the Status Indicator displays yellow (this may take up to 15 seconds).
4. Release the Control button.
5. When the Status Indicator changes to Green (may take up to 1 minute), the process is complete and the AXIS 241Q/241S has been reset.



# Unit Connections

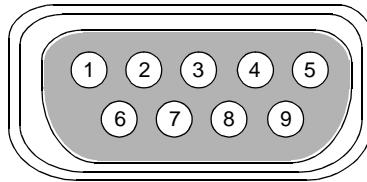
The following connections are described in this section:

- *The D-Sub Connector*, on page 39
- *The I/O Terminal Block*, on page 40
- *COM Port RS232/PTZ and COM Port RS485*, on page 41
- *Y/C TO BNC CABLE (AXIS 241S only)*, on page 43

## The D-Sub Connector

The AXIS 241Q/241S provides one 9-pin D-sub connector, providing the physical interface for an RS-232 port, used for connecting accessory equipment; such as stand-alone Pan/Tilt devices for the remote positioning of connected video cameras. Diagram of the RS-232 connector and pin assignment table:

Pin	Function
1	CD
2	- RXD
3	- TXD
4	DTR
5	GND
6	DSR
7	RTS
8	CTS
9	RI



## The I/O Terminal Block

This section describes the pinout and interface support provided by the 12-pin I/O Terminal Block consisting of:

- 4 digital transistor outputs
- 4 digital inputs
- an RS-485 interface
- auxiliary power and GND

The Terminal Block is used in applications for e.g. motion detection, event triggering, time lapse recording, alarm notification via email, picture storage to FTP locations.

- **Inputs** - e.g. a doorbell. If the doorbell is pressed, the state changes, and the input will be active (shown under [Event Configuration | Port Status](#)).
- **Outputs** - e.g. an alarm device that can be activated from Output buttons from the [Live View](#) page or as an action to an [Event Type](#). The output will show as active ([Event Configuration | Port Status](#)), if the alarm device is activated.

Pin	Function	Description
1	Auxiliary DC Power Input	7-20 VDC/min 7W. Electrically connected in parallel with PS-k power connector, provides an auxiliary connector for mains power to the unit. If the product is powered via this pin, use a fuse (Fuse rating: 1A Slow). This pin can also be used to power auxiliary equipment, max 100mA
2	GND	
3	Digital Input 1	Connect to GND to activate or leave floating (or unconnected) to deactivate.
4	Digital Input 2	
5	Digital Input 3	
6	Digital Input 4	
7	Transistor Output	With a maximum load of 100mA and maximum voltage of 24V DC, this output has an open-collector NPN transistor with the emitter connected to pin 2 (GND). If it is to be used with an external relay, a diode must be connected in parallel with the load for protection against any voltage transients.
8	Transistor Output	
9	Transistor Output	
10	Transistor Output	
11	RS-485 - A (non-inverting)	A half-duplex RS-485 interface for controlling auxiliary equipment, e.g. PTZ devices.
12	RS-485 - B (inverting)	

One 12 pin terminal block is provided with the AXIS 241Q/241S. Connect the input/output devices to the terminal block:

1. Loosen the corresponding screw on top of the pin (see the table above to determine which pin to use).
2. Push the cable into the connector and secure it by fastening the screw.
3. Once all devices are connected, connect the female terminal block to the video server terminal block, making sure that all cables are securely fastened.



## COM Port RS232/PTZ and COM Port RS485

The COM Port RS232/PTZ and COM Port RS485 support several operational modes:

- **Generic TCP/IP** - enables the video server to receive status/data and send commands via TCP/IP
- **Generic HTTP** - enables the video server to receive status/data and send commands via HTTP
- **Pan Tilt Zoom** - for controlling a Pan Tilt Zoom device. A PTZ device requires a driver for its function. Drivers may be obtained from [www.axis.com](http://www.axis.com)

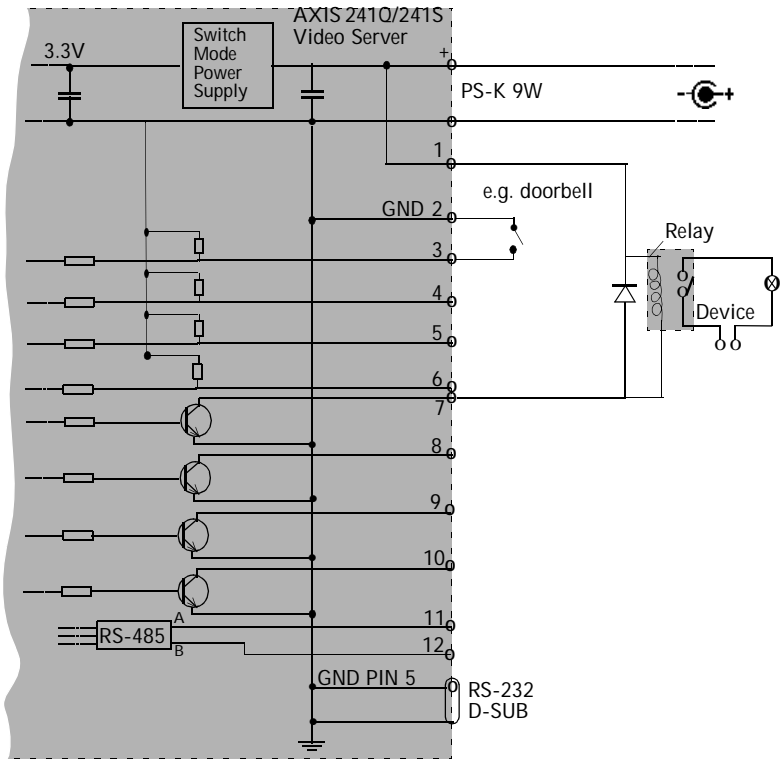
## Connecting Pan/Tilt Devices

The AXIS 241Q/241S supports several Pan Tilt device drivers. Please see [www.axis.com](http://www.axis.com) for a complete list of supported devices. Follow the instructions below to install a Pan/Tilt device:

1. Connect the Pan/Tilt device to the Pan/Tilt port using an appropriate cable.
2. Go to **Setup | System Options | Ports & Devices | RS232** in the internal Web pages or the video server.
3. Select **Pan Tilt Zoom** from the **Port settings Usage** drop-down list.
4. Click **Upload** to install a PTZ driver.  
(PTZ drivers are available from the Axis Web site at <http://www.axis.com>)
5. Click **Port Options...** to modify the serial port settings. The default values correspond to the values specified by the PTZ driver.

**Note:** Advanced users and application developers can also use the Axis Application Programming Interface and HTTP specification for generic control of pan tilt devices using CGI parameters or a TCP/IP client. Please refer to the Axis Website at <http://www.axis.com> for further information.

Schematic Diagram - Terminal Connectors



## Y/C TO BNC CABLE (AXIS 241S only)

The AXIS 241S supports conversion from Y/C (S-video) to composite video using an Y/C to BNC cable. The cable is available as an accessory - see the Axis Web site at: <http://www.axis.com>. Follow these instructions to connect the Y/C to BNC cable:

1. Connect the BNC connector marked **IN** to the **Video In** connector on the video server.
2. Connect the BNC connector marked **OUT** to the **Video OUT** connector on the video server.
3. Connect the Y/C connector to the Y/C video unit (S-video).
4. Set the dip switches on the front panel of the unit to 1=on, 2=on, 3=off, 4=off.
5. Go to the AXIS 241S Web pages under **Setup | Video & Image | Video Source** and select **Y/C (S-video)** from the **Physical connector** drop-down list.



One female MiniDin 4-pol connector  
split into two BNC connectors

The Y/C to BNC cable is available as an accessory. Below is a description of how the cable is assembled for those who wish to use standard components:

1. Use two male BNC connectors and one female 4-pole MiniDin connector.
2. Connect pin 1, 2 and shield on the MiniDin connector to the shield on the two BNC connectors.
3. Connect pin 3 (Y) on the MiniDin connector to centre pin on one of the male BNC connectors, mark this BNC connector with **IN**.
4. Connect pin 4 (C) on the MiniDin connector to centre pin on the other male BNC connector, mark this BNC connector with **OUT**.

# Troubleshooting

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## Checking the Firmware

One of your first actions when troubleshooting a problem should be to check the currently installed firmware version. The latest version may contain a correction that fixes your particular problem. The current software version in your AXIS 241Q/241S is available under **Setup | Basic Configuration**.

## Updating the Firmware

The firmware is software that determines the functionality of the AXIS 241Q/241S. When you download firmware from the Axis Web site, your Axis product will receive the latest available functionality. Always read the upgrade instructions and release notes available with each new release, before updating the firmware.

New firmware can be downloaded to the AXIS 241Q/241S over the network.

**Note:** Preconfigured and customized settings will be retained for use when the new firmware is running (providing that the features are available in the new firmware) although this is not guaranteed by Axis Communications. Always read the upgrade instructions and release notes available with each new release, before updating the firmware.

1. Save the firmware file to your computer. The latest version of the AXIS 241Q/241S firmware is available free of charge from the Axis Web site at <http://www.axis.com/techsup> or from your local distributor.
2. Go to **Setup | System Options | Maintenance** in the video server's Web pages.
3. In the **Upgrade Server** section and browse to the desired firmware file on your computer. Click **Upgrade**.

### Upgrade Server

Upgrade the AXIS 241Q Video Server with the latest firmware.

Specify the firmware to upgrade to:  **Browse...** and click **Upgrade**

**Note:** Do not disconnect power to the unit during the flash upgrade. The unit restarts automatically after the upgrade has completed. (1-10 minutes.)

**Notes:** Always read the upgrade instructions available with each new release, before updating the firmware.

After starting the process, you should always wait at least 20 minutes before restarting the AXIS 241Q/241S, even if you suspect the procedure has failed.

Your dealer reserves the right to charge for any repair attributable to faulty updating by the user.

## Support

If you contact the Axis support desk, please help us help you resolve your problems expediently by providing a server report, log file and a brief description of the problem.

**Server Report** - go to **Setup | System Options | Support Overview**. The server report contains important information about the server and its software, as well as a list of the current parameters.

**Log file** - go to **Setup | System Options | Logs & Reports**. The Log file records events within the unit since the last restart of the system and can prove a useful diagnostic tool for troubleshooting.

## Symptoms, Possible Causes and Remedial Actions

### Problems setting the IP address

Using ARP Ping - the IP address must be set within two minutes after the power has been applied to the video server	Restart the server and try again. Also, make sure the ping length is set to 408. See <i>Manual Installation using ARP and Ping in Windows</i> , on page 11 - or - <i>Manual Installation using ARP and Ping in UNIX/Linux</i> , on page 12
The video server is located on a different subnet.	If the IP address intended for the AXIS 241Q/241S and the IP address of your computer are located on different subnets, you will not be able to set the IP address. Contact your network administrator for an IP address on the same subnet as the computer you are performing the installation from.
The IP address is being used by another device	<p>Disconnect the power from the AXIS 241Q/241S.</p> <p>Run the Ping command (in a Command/DOS window, type ping and the IP address of the unit).</p> <p>If you receive: Reply from &lt;IP address&gt;: bytes = 32; time = 10 ms..... - this means that the IP address may already be in use by another device on your network. You must obtain a new IP address and reinstall the unit.</p> <p>If you receive: Request timed out - this means that the IP address is available for use with your video server. In this case, check all cabling and reinstall the unit.</p>

### The AXIS 241Q/241S cannot be accessed from a Web browser

The IP address has been changed by DHCP	<ol style="list-style-type: none"> <li>1) Move the AXIS 241Q/241S to an isolated network or to one with no DHCP or BOOTP server. Set the IP address again, using the ARP Ping command.</li> <li>2) Access the unit and disable BOOTP and DHCP in the TCP/IP settings. Return the unit to the main network. The unit now has a fixed IP address that will not change.</li> <li>3) As an alternative to 2), if dynamic IP address via DHCP or BOOTP is required, select the required service and then configure IP address change notification from the network settings. Return the unit to the main network. The unit will now have a dynamic IP address, but will notify you if the address changes.</li> </ol>
Other networking problems	Test the network cable by connecting it to another network device, then Ping that device from your workstation. See instructions above.

### Cannot send notifications, uploads, alarms, etc, to a destination outside the local network

Firewall protection	The video server can be configured to use a SOCKS server to reach networks on the other side of a firewall/proxy server
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### Your AXIS 241Q/241S is accessible locally, but not externally

Firewall protection	Check the Internet firewall with your system administrator.
Default routers required	Check if you need to configure the default router settings.
The Internet site is too heavily loaded	Use a script running on your web server to relay images from the AXIS 241Q/241S to the Internet.

### The Power indicator is not constantly lit

Faulty power supply	Verify that you are using an AXIS PS-K power supply.
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**The Status indicator is flashing red rapidly**

Hardware failure	Contact your Axis dealer.
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**Status led is flashing red and the server is inaccessible**

A firmware upgrade has been interrupted or the firmware has in some other way been damaged.	A rescue firmware is running in the product. First, set the IP address using AXIS IP utility or ARP and Ping, see <i>Installing on a network</i> , on page 9.  Then, from a Web browser, access the unit and download the latest firmware to the product, see <i>Updating the Firmware</i> , on page 44.
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**No images are displayed in the Web interface**

Problem with AMC ( <i>Internet Explorer only</i> )	To enable the updating of images in Microsoft Internet Explorer, set your Web browser to allow ActiveX controls. Also, make sure that AXIS Media Control (AMC) component is installed on your workstation.
---	--

Installation of additional ActiveX component restricted or prohibited	Configure your AXIS 241Q/241S to use a Java applet for updating the images under Live View Config   Layout   Default Viewer for Internet Explorer. See help files for more information.
---	---

**Video Image Problems**

Image too dark or too light.	Check that the termination dip switch for the video source is set to the correct position. See also the help files on Video Source Settings
------------------------------	---

Black borders around the video image	Adjust the X and/or Y offset, in the Video Source Settings. See the online help files for information.
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Problems uploading own files	There is only limited space available for the upload of your own files. Try deleting one or more existing files, to free up space
------------------------------	---

Missing images in uploads	This can occur when trying to use a larger image buffer than is actually available. Try lowering the frame rate or the upload period.
---------------------------	---

Slow image update	Configuring, e.g. pre-buffers, motion detection, hi-res images, high frame rate etc will reduce the performance of the video server.
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Slow performance	Slow performance may be caused by e.g. heavy network traffic, many users with access to unit, low performing client, use of features such as Motion Detection, Event handling, Image rotation.
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**Bad snapshot images**

Display incorrectly configured on your workstation	In Display Properties, configure your display to show at least 65000 colors, i.e. at least 16-bit. Using only 16 or 256 colors on your display will produce dithering artifacts in the image.
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**Incorrect exposure in images**

Incorrect line termination	If the AXIS 241Q/241S is to be connected in loop through with other equipment, disable the input termination by turning the corresponding DIP switch to OFF.
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For additional assistance, please contact your reseller or check the product's support pages on the Axis Website at <http://www.axis.com/techsup>

# Technical Specifications

Detail	Specification
System Requirements	Standard Internet TCP/IP suite of protocols      Windows, Linux, UNIX, Mac. etc.
Supported Web Browsers	Windows - Microsoft Internet Explorer 5.x or later and Mozilla 1.4 or later Linux - Mozilla 1.4 or later Mac OSX - Netscape 7.x or later or Mozilla 1.4 or later
Installation	Physical network connection using RJ-45 twisted pair cable & AXIS PS-K Power Supply. Use as a standalone system or as an add-on to existing CCTV systems Installs directly to NTSC or PAL video cameras using BNC connectors
Management	Remote configuration and status using Web-based tools
Compression	Motion-JPEG, as well as single snapshot JPEG images. User-controlled compression level
Video Features	Time stamp, text overlay, image overlay, image rotation Color control (B/W or color)
Video Inputs (AXIS 241Q)	Supports up to 4 BNC composite video inputs with 75 Ohm/Hi Z termination and includes autosensing for NTSC and PAL
Video Inputs (AXIS 241S)	Supports 1 BNC composite video connection with 75 Ohm/Hi Z termination and includes autosensing for NTSC and PAL. Supports Y/C (s-video) connection.
Video Output (AXIS 241S)	A single video output (VIDEO OUT) with a coax/BNC connector (Loop through) Allows direct connection e.g. of an external monitor Supports Y/C TO BNC CABLE
Networking	10baseT Ethernet or 100baseTX Fast Ethernet, TCP/IP, HTTP, FTP, SMTP, NTP, ARP, BOOTP, DNS, UPnP, SOCKS v.4.0/v.5.0, HTTPS
General I/O	4 digital alarm inputs and 4 digital output transistors (max 24V, 0.1 A) supplied on a single terminal block connector
Pre/Post Alarm Buffer	Memory available for pre/post alarm image storage: AXIS 241Q - up to 36MB AXIS 241S - up to 9MB
Serial Connectors	RS-232, max 115 kbit/s, half-duplex.
Pan/Tilt/Zoom	PTZ support for remote camera control. Please see <a href="http://www.axis.com">www.axis.com</a> for information about supported devices
Security	Multi-user password protection, IP address filtering, HTTPS
Operating Conditions:	Temp: 5°C (41°F) to 50°C (122°F), Humidity: 20-80% RHG.
Approvals EMC	FCC Subpart B Class A, B EN 55022: 1998 Class B EN 61000-3-2:2000 EN 61000-3-3:2000 EN 55024:1998 VCCI Class B AS/NZS 3548
Approvals - Safety:	EN60950. Power supply (PS-K) - UL, CSA
Metrics:	Height: 1.7" (4.2 cm) Width: 5.5" (14.0 cm), Length: 6.1" (15.5 cm), Weight: 1.2 lb. (0.54 kg), excluding Power Supply

Detail	Specification	
Hardware	ARTPEC-2 compression chip ETRAX-100 LX (32-bit RISC, 100MIPS CPU)	AXIS 241Q - 64MByte RAM AXIS 241S - 32MB RAM 8 MByte FLASH
Power	2 alternative power sources:	External power supply included: 9V DC, 9W (PS-K) 7-20V DC, min 7W
Complimentary Software	AXIS Media Control (AMC) - ActiveX component software required for Microsoft Internet Explorer - installed automatically on first use	Optional: AXIS IP Utility - Windows installation
Axis Chipset Technology	Axis renowned chipset technology is built upon an open architecture that is streamlined to provide device connectivity independent of any file server.	

AXIS 241Q/241S is driven by a powerful AXIS ETRAX 32-bit RISC processor and includes the AXIS ARTPEC-2 which is a dedicated digital video surveillance compression chip.

## Performance

The AXIS 241Q/241S delivers the following file sizes (PAL):

PAL			PAL aspect ratio corrected		
	Resolution	Min-Max (KB)		Resolution	Min-Max (KB)
4CIF/4CIF-Quad	704x576	10 - 300	4CIF/4CIF-Quad	768x576	11 - 330
2CIF expanded	704x576	10 - 250	2CIF expanded	768x576	11 - 270
2CIF	704x288	5 - 150	2CIF	768x288	5.5 - 160
CIF/CIF-Quad	352x288	2.5 - 80	CIF/CIF-Quad	384x288	2.7 - 90
QCIF	176x144	1 - 20	QCIF	192x144	1.1 - 22

Performance-The AXIS 241Q/241S delivers the following file sizes (NTSC):

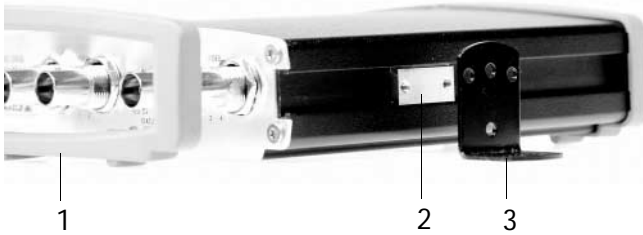
NTSC			NTSC aspect ratio corrected		
	Resolution	Min-Max (KB)		Resolution	Min-Max (KB)
4CIF/4CIF-Quad	704x480	8 - 250	4CIF/4CIF-Quad	640x480	7 - 230
2CIF expanded	704x480	8 - 200	2CIF expanded	640x480	7 - 180
2CIF	704x240	4 - 125	2CIF	640x240	3.5 - 110
CIF/CIF-Quad	352x240	2 - 70	CIF/CIF-Quad	320x240	1.8 - 60
QCIF	176x120	0.8 - 15	QCIF	160x120	0.7 - 14



## Installieren des AXIS 241Q/241S

### Montage des AXIS 241Q/241S

Der AXIS 241Q/241S wird mit einem Montagesatz für Wandanbringung oder Rackeinbau geliefert. Befolgen Sie die nachstehenden Anweisungen für die Anbringung der Halterung des Videoservers:



1. Den grauen Rahmen vorn am Videoserver abziehen (werkzeugfrei).
2. Die Metallplatten in die Schlitze auf beiden Seiten des Videoservers schieben.
3. Die Halterungen auf beiden Seiten in die richtige Lage bringen und mit den dafür vorgesehenen Schrauben festschrauben.

Die Halterungen können so montiert werden, dass der Videoserver auf einer senkrechten Oberfläche angebracht oder in einem Rack (4U) eingebaut werden kann.

### Anschluss der Videokameras an den AXIS 241Q/241S

Schließen Sie den Video-Ausgang Ihrer Kamera(s) mit einem Standard-75-Ohm-Koaxial-Videokabel mit BNC-Anschlüssen an den AXIS 241Q/241S Videoserver an.



Hinweis: Nehmen Sie einen RCA-nach-BNC-Wandler, falls Ihre Kamera einen Standard-Phonoanschluss (RCA) hat.

### Installieren in einem Netzwerk

Der AXIS 241Q/241S ist für die Installation in einem Ethernet-Netzwerk vorgesehen. Dazu muss dem Videoserver entweder manuell oder über einen automatischen Netzservice (DHCP) eine IP-Adresse zugewiesen werden. Wählen Sie entsprechend Ihrem Netz eines der folgenden Verfahren:

- *Manuelle Installation mit AXIS IP Utility*, auf Seite 50
- *Manuelle Installation mit ARP und Ping in Windows*, auf Seite 51
- *Manuelle Installation mit ARP und Ping in UNIX/Linux*, auf Seite 52
- *AXIS Internet Dynamic DNS Service*, auf Seite 53

Hinweise:

- Der AXIS 241Q/241S hat eine Standard-IP-Adresse - 192.168.0.90
- DHCP wird standardmäßig aktiviert.

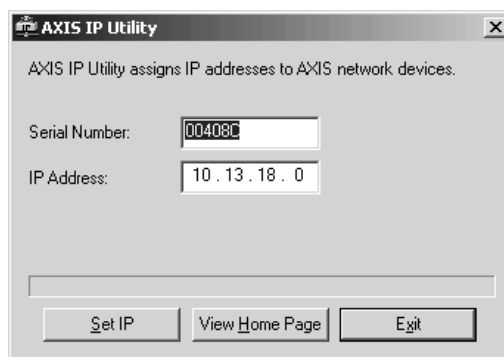
## Manuelle Installation mit AXIS IP Utility

AXIS IP Utility ist eine Anwendungssoftware von Windows, mit der der der AXIS 241Q/241S über eine statische IP-Adresse in Ihrem lokalen Netz installiert wird.

- Die AXIS IP Utility-Software von den Support-Seiten unter <http://www.axis.com/techsup/software> herunterladen, sie ist kostenlos.
- Die Datei setup.exe doppelklicken und die Installationsanweisungen auf dem Bildschirm befolgen.

So legen Sie die IP-Adresse mit Hilfe von AXIS IP Utility fest:

1. Eine IP-Adresse für Ihren AXIS 241Q/241S erfassen. (AXIS IP Utility erkennt das Subnetz, in dem Ihr Computer angeschlossen ist. Der AXIS 241Q/241S muss im selben Subnetz angeschlossen sein.)
2. Ein Standard RJ-45-Netzkabel an Ihren AXIS 241Q/241S anschließen und ihn damit ans Netz anschließen.
3. Den AXIS 241Q/241S ans Stromnetz anschließen.
4. AXIS IP Utility auf Ihrem Computer starten.
5. Die Seriennummer eingeben:



Die Seriennummer/MAC-Adresse (S/N) steht auf dem Aufkleber auf der Unterseite des AXIS 241Q/241S

6. Die für Ihren AXIS 241Q/241S erfasste IP-Adresse eingeben und **Set IP** anklicken.
7. Wenn AXIS IP Utility dazu auffordert, den Videoserver durch Abtrennen und erneutes Anschließen der externen Stromversorgung neu starten.
8. Eine Meldung zur Bestätigung, dass die IP-Adresse festgelegt wurde, erscheint. **OK** anklicken.
9. **View Home Page** zum Zugriff auf die AXIS 241Q/241S Web-Seiten anklicken.
10. Ein Passwort für den Root-Benutzer (Administrator) eingeben.
11. Ggf. die **AMC**-Installation auf Ihrem Arbeitsplatz bestätigen.

**Hinweis:** AMC muss installiert sein, damit direkt übertragene Bilder in Microsoft Internet Explorer gesehen werden können. Falls Ihr Arbeitsumfeld weitere Softwarekomponenten nicht zulässt, können Sie Ihren AXIS 241Q/241S zum Aktualisieren der Bilder für eine Java-Softwarekomponente konfigurieren. Siehe Hilfe-Datei unter **Live View Config | Layout | Default Viewer for Internet Explorer**. Oder einen anderen unterstützten Webbrowser verwenden, siehe *Technical Specifications*, auf Seite 47.

12. Die Installation ist jetzt abgeschlossen, weiter mit *Using the video server*, auf Seite 14.

## Manuelle Installation mit ARP und Ping in Windows

Weisen Sie Ihrem Produkt wie folgt eine individuelle IP-Adresse von einem Computer Ihres Netzwerks aus zu:

1. Eine nicht benutzte IP-Adresse für den AXIS 241Q/241S von Ihrem Netzwerk-Administrator erfassen.
2. Ein Standard-Netzkabel an Ihren AXIS 241Q/241S anschließen und ihn damit ans Netz anschließen.
3. Die Seriennummer/MAC-Adresse (S/N) steht auf dem Aufkleber auf der Unterseite des AXIS 241Q/241S
4. Von einem Computer Ihres Netzwerks aus eine Befehlszeile öffnen, d.h. aus dem Windows Startmenü Run... wählen und cmd im Feld eingeben. OK klicken.
5. Folgende Befehle eingeben:

**Syntax:**

```
arp -s <IP Address> <MAC Address>
ping -l 408 -t <IP Address>
```

**Hinweis:** Auf den Ping-Befehl folgt -l (untere Umschaltung L)

### Beispiel

The screenshot shows a Windows command prompt window titled 'C:\WINNT\system32\cmd.exe'. The text inside the window is as follows:

```
Microsoft Windows 2000 [Version 5.00.2195]
(C) Copyright 1985-2000 Microsoft Corp.

R:\>arp -s 192.168.0.125 00-40-8c-1a-2b-3c
R:\>ping -l 408 -t 192.168.0.125_
```

6. Den AXIS 241Q/241S ans Stromnetz anschließen.
7. Bei 'Reply from 192.168.0.125: ...' (ca. 10-15 Sek.), Ctrl+C zum Beenden der ARP Ping-Sitzung betätigen.
8. Einen Webbrowser starten und die IP-Adresse im Feld Address/Location eingeben.
9. Enter drücken.
10. Ein Passwort für den Root-Benutzer (Administrator) eingeben.
11. Ggf. die AMC-Installation auf Ihrem Arbeitsplatz bestätigen.

**Hinweis:** AMC muss installiert sein, damit direkt übertragene Bilder in Microsoft Internet Explorer gesehen werden können. Falls Ihr Arbeitsumfeld weitere Softwarekomponenten nicht zulässt, können Sie Ihren AXIS 241Q/241S zum Aktualisieren der Bilder für eine Java-Softwarekomponente konfigurieren. Einzelheiten dazu siehe Hilfe-Datei unter Live View Config | Layout | Default Viewer for Internet Explorer. Oder einen anderen unterstützten Webbrowser verwenden, siehe *Technical Specifications*, auf Seite 47.

12. Die Installation ist jetzt abgeschlossen, weiter mit *Using the video server*, auf Seite 14.

## Manuelle Installation mit ARP und Ping in UNIX/Linux

Weisen Sie Ihrem Produkt wie folgt eine individuelle IP-Adresse von einem Computer Ihres Netzwerks aus zu:

1. Eine nicht benutzte IP-Adresse für den AXIS 241Q/241S von Ihrem Netzwerk-Administrator erfassen.
2. Ein Standard-Netzka­bel an Ihren AXIS 241Q/241S anschließen und ihn damit ans Netz anschließen.
3. Die Seriennummer/MAC-Adresse (S/N) steht auf dem Aufkleber auf der Unterseite des AXIS 241Q/241S.

Syntax:

```
arp -s <IP Address> <MAC Address> temp  
ping -s 408 <IP Address>
```

Beispiel:

```
arp -s 192.168.0.125 00:40:8c:18:10:00 temp  
ping -s 408 192.168.0.125
```

4. Den AXIS 241Q/241S ans Stromnetz anschließen.
5. Die ARP Ping-Sitzung beenden, sobald 'Reply from 192.168.0.125: ...' erscheint (ca. 10-15-Sek.).
6. Einen Webbrowser starten und die IP-Adresse im Feld Address/Location eingeben.
7. Enter drücken.
8. Ein Passwort für den Root-Benutzer (Administrator) eingeben.
9. Die Installation ist jetzt abgeschlossen, weiter mit *Using the video server*, auf Seite 14.

## AXIS Internet Dynamic DNS Service

AXIS Internet Dynamic DNS Service bietet ein Ein-Klick-Verfahren an, das den AXIS 241Q/241S in Ihrem lokalen Netz sowie über das Internet verfügbar macht. Bei der Installation erhält der AXIS 241Q/241S eine URL-Adresse (Webadresse), über die dann der Zugang ermöglicht wird. Der Videosever kann jederzeit vom Service abregistriert werden.

### Vorgaben

Für die Benutzung des AXIS Internet Dynamic DNS Service gelten folgende Vorgaben:

- Ein DHCP Server mit Netzanschluss.
- Ein Internetanschluss, der keinen Proxyserver für HTTP-Zugang braucht.

### Installation

Hinweis: Bei diesem Verfahren werden IP-Adresse des AXIS 241Q/241S, Firmware-Version, Produkttyp und Seriennummer an den Axis Internet Dynamic DNS Service geschickt. Es werden keine persönlichen Daten übertragen.

1. Den AXIS 241Q/241S mit einem Standard (RJ-45)-Netzkabel an Ihr lokales Netz anschließen.
2. Den Videosever ans Stromnetz anschließen.
3. Warten, bis die Statusanzeige vorn am Videosever mit grünem Dauerlicht leuchtet, d.h. sie hat eine dynamische IP-Adresse von einem DHCP-Server in Ihrem Netz erhalten.
4. 60 Sek. warten, dann die Steuertaste vorn am Server ein Mal drücken. Die Statusanzeige vorn am Server blinkt daraufhin grün, während der Server an den AXIS Internet Dynamic DNS Service angeschlossen wird. Nach Abschluss der Registrierung geht die Anzeige wieder auf Dauergrün über.
5. Auf der Website [www.axiscam.net](http://www.axiscam.net) werden Sie durch den restlichen Installationsprozess geführt. Die Seriennummer Ihres Produktes bereit halten und die Anweisungen auf dem Bildschirm befolgen.

Die Seriennummer/MAC-Adresse (S/N) steht auf dem Aufkleber auf der Unterseite des AXIS 241Q/241S

6. Ein Passwort für den **Root**-Benutzer (Administrator) eingeben.
7. Ggf. die **AMC**-Installation auf Ihrem Arbeitsplatz bestätigen.

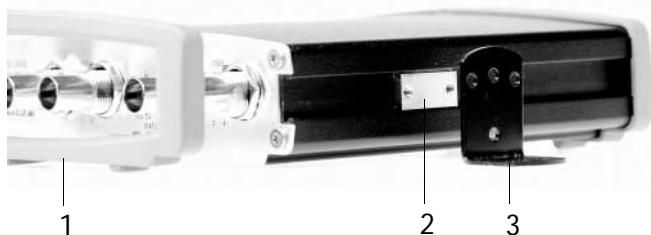
**Hinweis:** AMC muss installiert sein, damit direkt übertragene Bilder in Microsoft Internet Explorer gesehen werden können. Falls Ihr Arbeitsumfeld weitere Softwarekomponenten nicht zulässt, können Sie Ihren AXIS 241Q/241S zum Aktualisieren der Bilder für eine Java-Softwarekomponente konfigurieren. Einzelheiten dazu siehe Hilfe-Datei unter [Live View Config | Layout | Default Viewer for Internet Explorer](#). Oder einen anderen unterstützten Webbrowser verwenden, siehe *Technical Specifications*, auf Seite 47.

8. Die Installation ist jetzt abgeschlossen, weiter mit *Using the video server*, auf Seite 14.

## Installation du serveur AXIS 241Q/241S

### Montage du serveur AXIS 241Q/241S

AXIS 241Q/241S est équipé d'un kit de montage pour support mural ou sur baie (rack). Suivez les instructions ci-dessous pour fixer le support de montage au serveur vidéo :



1. Faites glisser la structure du panneau avant du serveur pour l'enlever (pas besoins d'outils).
2. Insérez les plaques métalliques dans les logements aux côtés du serveur vidéo.
3. Positionnez et fixez les supports sur chaque côté à l'aide des vis prévues à cet effet.

Les supports de montage peuvent être positionnés pour monter le serveur vidéo sur une surface verticale ou dans une raie (4U).

### Connexion des caméras vidéos à AXIS 241Q/241S

Connectez la sortie vidéo de votre ou vos caméras au AXIS 241Q/241S serveur vidéo à l'aide d'un câble vidéo coaxial standard de 75 Ohm avec connecteurs BNC.

Utilisez un convertisseur RCA/BNC si votre caméra dispose d'un connecteur de type phono (RCA).



### Installation sur un réseau

AXIS 241Q/241S a été conçu pour l'installation au sein d'un réseau Ethernet. Cela signifie affecter une adresse IP au serveur vidéo, soit manuellement soit via un service réseau automatisé (DHCP). Sélectionnez l'une des procédures suivantes en fonction de votre réseau :

- *Installation manuelle à l'aide de l'utilitaire AXIS IP*, à la page 55
- *Installation manuelle à l'aide d'ARP and Ping sous Windows*, à la page 56
- *Installation manuelle à l'aide d'ARP and Ping sous Windows*, à la page 57
- *AXIS Internet Dynamic DNS Service*, à la page 58

Remarques : • L'adresse IP d'AXIS 241Q/241S par défaut est - 192.168.0.90  
• DHCP est activée par défaut.

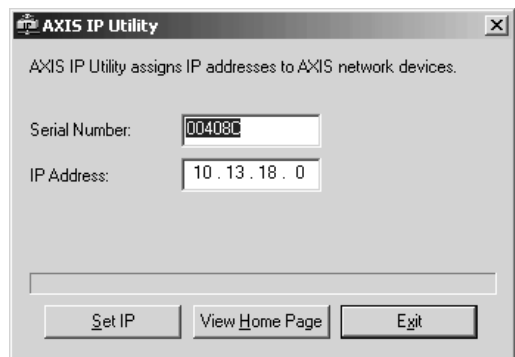
## Installation manuelle à l'aide de l'utilitaire AXIS IP

L'utilitaire AXIS IP est une application logicielle de Windows permettant d'installer AXIS 241Q/241S sur votre réseau local à l'aide d'une adresse IP.

- Téléchargez le logiciel Utilitaire AXIS IP sur votre ordinateur, gratuit des pages de support du site <http://www.axis.com/techsup/software>
- Double-cliquez sur le fichier setup.exe et suivez les instructions sur l'écran pour installer le logiciel sur votre ordinateur.

Suivez les instructions ci-après pour définir l'adresse IP manuellement à l'aide de l'utilitaire AXIS IP :

1. Acquérez une adresse IP pour votre AXIS 241Q/241S. (AXIS IP L'utilitaire détecte le sous-réseau auquel votre ordinateur est connecté. AXIS 241Q/241S doit être installé sur le même sous-réseau)
2. Connectez un câble réseau standard RJ-45 à votre AXIS 241Q/241S et reliez-le au réseau.
3. Connectez le cordon d'alimentation à AXIS 241Q/241S.
4. Lancez l'utilitaire AXIS IP sur votre ordinateur.
5. Entrer le numéro de série :



Le numéro de série/adresse MAC (S/N) se trouve sur l'étiquette collée sur la partie inférieure du AXIS 241Q/241S

6. Entrez une adresse IP acquise pour votre AXIS 241Q/241S et cliquez sur Définir IP.
7. A l'invite de l'utilitaire AXIS IP, redémarrez le serveur vidéo en débranchant et en rebranchant l'alimentation.
8. Un message confirmant que l'adresse IP a été défini, s'affichera sur l'écran, cliquez sur OK.
9. Cliquez sur Afficher page d'accueil pour accéder aux AXIS 241Q/241S pages Web.
10. Entrez un mot de passe pour l'utilisateur racine (administrateur).
11. Le cas échéant, acceptez l'installation de AMC sur votre station de travail.

Remarque : AMC doit être installé pour visionner les images en directe dans Microsoft Internet Explorer. Si votre environnement de travail limite les composants logiciels supplémentaires, vous pouvez configurer votre AXIS 241Q/241S pour utiliser un applet Java et mettre à jour les images. Reportez-vous au fichier d'aide sous Live View Config | Layout | Default Viewer for Internet Explorer pour de plus amples informations. Vous pouvez également utiliser un autre navigateur Web ; reportez-vous aux *Technical Specifications*, à la page 47 pour de plus amples informations.

12. L'installation est désormais terminée, passez à *Using the video server*, à la page 14.

## Installation manuelle à l'aide d'ARP and Ping sous Windows

Affectez une adresse IP unique à votre ordinateur à partir d'un ordinateur du réseau, en procédant comme suit :

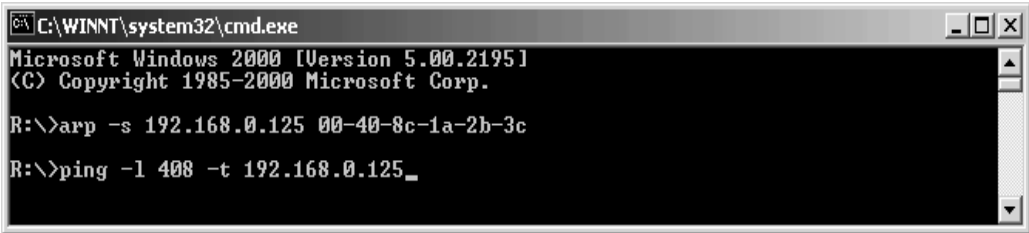
1. Acquérez une adresse IP non utilisée pour AXIS 241Q/241S en la demandant à votre administrateur de réseau.
2. Connectez un câble réseau standard à votre AXIS 241Q/241S et reliez-le au réseau.
3. Repérez le numéro de série/adresse MAC (S/N) sur l'étiquette collée sur la partie inférieure du AXIS 241Q/241S
4. A partir d'un ordinateur de votre réseau, ouvrez une Command Prompt (commande d'invite), par exemple à partir du menu Démarrer de Windows, sélectionnez Exécuter... et tapez cmd dans le champ. Cliquez sur OK.
5. Entrez les commandes :

### Syntaxe

```
arp -s <adresse IP > <adresse MAC>
ping -l 408 -t <Adresse IP>
```

**Remarque :** La commande ping est suivie de -l (L minuscule)

### Exemple



```
C:\WINNT\system32\cmd.exe
Microsoft Windows 2000 [Version 5.00.2195]
(C) Copyright 1985-2000 Microsoft Corp.

R:\>arp -s 192.168.0.125 00-40-8c-1a-2b-3c
R:\>ping -l 408 -t 192.168.0.125_
```

6. Connectez le cordon d'alimentation à AXIS 241Q/241S.
7. Lorsque Réponse de 192.168.0.125 s'affiche (au bout d'environ 10-15 secondes), tapez Ctrl+C pour fermer la session ARP Ping.
8. Lancez un navigateur Web et entrez l'adresse IP dans le champ Adresse/emplacement.
9. Appuyez sur Enter.
10. Entrez un mot de passe pour l'utilisateur racine (administrateur).
11. Le cas échéant, acceptez l'installation de AMC sur votre station de travail.

Remarque : AMC doit être installé pour visionner les images en directe dans Microsoft Internet Explorer. Si votre environnement de travail limite les composants logiciels supplémentaires, vous pouvez configurer votre AXIS 241Q/241S pour utiliser un applet Java pour mettre à jour les images. Reportez-vous au fichier d'aide sous Live View Config | Layout | Default Viewer for Internet Explorer pour de plus amples informations. Vous pouvez également utiliser un autre navigateurWeb ; reportez-vous aux *Technical Specifications*, à la page 47.

12. L'installation est désormais terminée, passez à *Using the video server*, à la page 14.



## Installation manuelle à l'aide d'ARP and Ping sous Windows

Affectez une adresse IP unique à votre ordinateur à partir d'un ordinateur du réseau, en procédant comme suit :

1. Acquérez une adresse IP non utilisée pour AXIS 241Q/241S en la demandant à votre administrateur de réseau.
2. Connectez un câble réseau standard à votre AXIS 241Q/241S et reliez-le au réseau.
3. Repérez le numéro de série/adresse MAC (S/N) sur l'étiquette collée sur la partie inférieure du AXIS 241Q/241S

Syntaxe

```
arp -s <adresse IP> <adresse MAC>  
ping -s 408 <Adresse IP>
```

Exemple :

```
arp -s 192.168.0.125 00:40:8c:18:10:00 temp  
ping -s 408 192.168.0.125
```

4. Connecter le cordon d'alimentation à AXIS 241Q/241S.
5. Fermez la session ARP Ping session dès que le message 'Reply from 192.168.0.125: (Réponse de) ...' s'affiche (au bout d'environ 10-15-secondes).
6. Lancez un moteur Web browser et entrez l'adresse IP dans le champ Adresse/emplacement.
7. Appuyez sur Enter.
8. Entrez un mot de passe pour l'utilisateur racine (administrateur).
9. L'installation est désormais terminée, passez à *Using the video server*, à la page 14.

## AXIS Internet Dynamic DNS Service

AXIS Internet Dynamic DNS Service propose une procédure d'un seul clic qui rend AXIS 241Q/241S disponible sur le réseau local et sur l'internet. A l'installation, AXIS 241Q/241S recevra une URL (adresse web), que vous pouvez utiliser pour l'accès. Le serveur vidéo peut être désactivé à tout moment.

### Configuration minimale requise

Pour utiliser AXIS Internet Dynamic DNS Service, les conditions suivantes doivent être remplies :

- un serveur DHCP relié au réseau
- Une connexion Internet sans serveur proxy pour l'accès HTTP.

### Procédure d'installation

Remarquez que cette procédure enverra l'adresse AXIS 241Q/241S'IP, la version du logiciel microprogrammé et le numéro de série à Axis Internet Dynamic DNS Service. Aucune information personnelle ne sera transmise.

1. Connectez AXIS 241Q/241S à votre réseau local en utilisant un câble de réseau standard (RJ-45).
2. Connectez le cordon d'alimentation au serveur vidéo.
3. Attendez que l'indicateur d'état sur la partie avant du serveur vidéo soit vert fixe, ce qui signifie la réception d'une adresse IP dynamique d'un serveur DHCP sur votre réseau.
4. Attendez 60 secondes et appuyez une fois sur le bouton de commande du panneau avant. L'indicateur d'état sur la partie avant du serveur vidéo sera vert clignotant lors de la connexion à AXIS Internet Dynamic DNS service. Une fois le processus d'enregistrement terminé, l'indicateur redevient vert fixe.
5. Visitez le site [www.axiscam.net](http://www.axiscam.net) où vous serez guidé pour l'exécution des phases rémanentes de l'installation. Veuillez avoir le numéro de série de votre produit à portée de main; suivez les instructions qui s'affichent sur l'écran.

Le numéro de série/adresse MAC (S/N) se trouve sur l'étiquette collée sur la partie inférieure du AXIS 241Q/241S

6. Entrez un mot de passe pour l'utilisateur **racine** (administrateur).
7. Le cas échéant, acceptez l'installation de **AMC** sur votre station de travail.

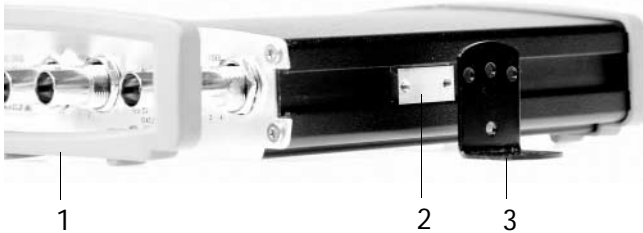
Remarque : AMC doit être installé pour visionner les images en directe dans Microsoft Internet Explorer. Si votre environnement de travail limite les composants logiciels supplémentaires, vous pouvez configurer votre AXIS 241Q/241S pour utiliser un applet Java pour mettre à jour les images. Reportez-vous au fichier d'aide sous Live View Config | Layout | Default Viewer for Internet Explorer pour de plus amples informations. Vous pouvez également utiliser un autre navigateurWeb ; reportez-vous aux *Technical Specifications*, à la page 47.

8. L'installation est désormais terminée, passez à *Using the video server*, à la page 14.

# Installazione di AXIS 241Q/241S

## Montaggio di AXIS 241Q/241S

AXIS 241Q/241S comprende un kit per montaggio a parete o su rack. Seguire le istruzioni in basso per collegare la staffa di montaggio al server video:



1. Estrarre il telaio grigio dal pannello del server video (non sono necessari attrezzi).

2. Inserire le piastre di metallo negli slot su entrambi i lati del server video.

3. Posizionare e collegare le staffe su ciascun lato utilizzando le viti fornite.

Le staffe di montaggio possono essere posizionate per montare il server video su una superficie verticale o in un armadio rack (4U).

## Connessione delle videocamere ad AXIS 241Q/241S

Collegare l'uscita video delle videocamere al server video AXIS 241Q/241S utilizzando un cavo coassiale standard da 75 Ohm con connettori BNC.

Nota: utilizzare un convertitore RCA-BNC se la videocamera è dotata di un connettore standard (RCA).



## Installazione su una rete

AXIS 241Q/241S è progettato per l'installazione in una rete Ethernet. Ciò implica l'assegnazione automatica (ad esempio DHCP) o manuale di un indirizzo IP al server video. Selezionare una delle seguenti procedure in base alla rete:

- *Installazione manuale mediante l'utility AXIS IP*, alla pagina 60
- *Installazione manuale mediante ARP e Ping in Windows*, alla pagina 61
- *Installazione manuale mediante ARP e Ping in UNIX/Linux*, alla pagina 62
- *Servizio AXIS Internet Dynamic DNS*, alla pagina 63

Note

- AXIS 241Q/241S ha un indirizzo IP predefinito-192.168.0.90
- DHCP è attivato per impostazione predefinita.

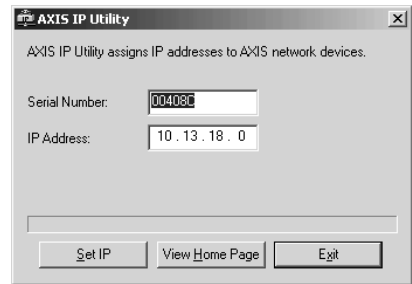
## Installazione manuale mediante l'utility AXIS IP

L'utility AXIS IP è un'applicazione software Windows che consente di installare AXIS 241Q/241S sulla rete locale mediante un indirizzo IP statico.

- Scaricare gratuitamente il software AXIS Utility AXIS IP Utility sul computer, dalle pagine di supporto all'indirizzo <http://www.axis.com/techsup/software>
- Fare doppio clic sul file setup.exe e seguire le istruzioni sullo schermo per installare il software sul computer.

Seguire queste istruzioni per l'impostazione manuale di un indirizzo IP mediante l'utility AXIS IP:

1. Ottenere un indirizzo IP per AXIS 241Q/241S. (l'utility AXIS IP rileva la sottorete a cui è connesso il computer. AXIS 241Q/241S deve essere installato sulla stessa sottorete).
2. Collegare un cavo di rete RJ-45 standard ad AXIS 241Q/241S e collegarlo alla rete.
3. Collegare l'alimentazione ad AXIS 241Q/241S.
4. Avviare l'utility AXIS IP sul computer.
5. Inserire il numero di serie:



Il numero di serie/indirizzo MAC (S/N) è riportato sull'etichetta che si trova sotto ad AXIS 241Q/241S

6. Inserire l'indirizzo IP ottenuto per AXIS 241Q/241S e fare clic su **Set IP** (Imposta IP).
7. Quando richiesto dall'utility AXIS IP, riavviare il server video scollegando e ricollegando l'alimentatore esterno.
8. Verrà visualizzato un messaggio di conferma che l'indirizzo IP è stato impostato, fare clic su **OK**.
9. Fare clic su **View Home Page** (Visualizza home page) per accedere alle pagine Web di AXIS 241Q/241S.
10. Immettere una password per l'utente **root** (amministratore).
11. Se necessario, accettare l'installazione di **AMC** sulla workstation.

**Nota:** AMC deve essere installato per visualizzare le immagini dal vivo con Internet Explorer di Microsoft.

Se l'ambiente di lavoro non consente l'aggiunta di componenti software, è possibile configurare AXIS 241Q/241S in modo da utilizzare un'applet Java per l'aggiornamento delle immagini. Vedere il file della Guida sotto **Live View Config | Layout | Default Viewer for Internet Explorer** (Config immagini dal vivo | Layout | Visualizzazione predefinita per Internet Explorer). Oppure utilizzare un altro browser Web supportato, vedere *Technical Specifications*, alla pagina 47.

12. L'installazione è stata completata, procedere con *Using the video server*, alla pagina 14.

## Installazione manuale mediante ARP e Ping in Windows

Assegnare al prodotto un indirizzo IP unico da un computer della rete, come segue:

1. Ottenere un indirizzo IP non utilizzato per AXIS 241Q/241S dall'amministratore di rete.
2. Collegare un cavo di rete standard ad AXIS 241Q/241S e poi collegarlo alla rete.
3. Individuare il numero di serie/indirizzo MAC (S/N) riportato sull'etichetta che si trova sotto ad AXIS 241Q/241S
4. Da un computer sulla rete, aprire un Prompt dei comandi, ad esempio, dal menu Start di Windows, selezionare Esegui... e digitare cmd nel campo. Fare clic su OK.
5. Immettere i comandi:

### Sintassi:

```
arp -s <Indirizzo IP> <Indirizzo MAC>
ping -l 408 -t <Indirizzo IP>
```

**Nota:** il comando ping è seguito da -l (L minuscola)

### Esempio

The screenshot shows a Windows command prompt window titled 'C:\WINNT\system32\cmd.exe'. The text inside the window reads: 'Microsoft Windows 2000 [Version 5.00.2195] (C) Copyright 1985-2000 Microsoft Corp.' followed by the command 'R:\>arp -s 192.168.0.125 00-40-8c-1a-2b-3c' and the subsequent command 'R:\>ping -l 408 -t 192.168.0.125\_'. The cursor is positioned at the end of the second command.

6. Collegare l'alimentazione ad AXIS 241Q/241S.
7. Quando viene visualizzato 'Reply from 192.168.0.125:...' (circa 10-15 secondi), digitare Ctrl+C per chiudere la sessione ARP Ping.
8. Avviare un browser Web e immettere l'indirizzo IP nel campo Indirizzo/Posizione.
9. Premere Invio.
10. Immettere una password per l'utente root (amministratore).
11. Se necessario, accettare l'installazione di AMC sulla workstation.

**Nota:** AMC deve essere installato per visualizzare le immagini dal vivo in Internet Explorer di Microsoft. Se l'ambiente di lavoro non consente l'aggiunta di componenti software, è possibile configurare AXIS 241Q/241S in modo da utilizzare un'applet Java per l'aggiornamento delle immagini. Vedere il file della Guida sotto Live View Config | Layout | Default Viewer for Internet Explorer (Config immagini dal vivo | Layout | Visualizzazione predefinita per Internet Explorer) per informazioni. Oppure utilizzare un altro browser Web supportato, vedere *Technical Specifications*, alla pagina 47.

12. L'installazione è stata completata, procedere con *Using the video server*, alla pagina 14.

## Installazione manuale mediante ARP e Ping in UNIX/Linux

Assegnare al prodotto un indirizzo IP unico da un computer della rete, come segue:

1. Ottenere un indirizzo IP non utilizzato per AXIS 241Q/241S dall'amministratore di rete.
2. Collegare un cavo di rete standard ad AXIS 241Q/241S e poi collegarlo alla rete.
3. Individuare il numero di serie/indirizzo MAC (S/N) riportato sull'etichetta che si trova sotto a AXIS 241Q/241S

Sintassi:

```
arp -s <Indirizzo IP> <Indirizzo MAC> temp  
ping -s 408 <Indirizzo IP>
```

Esempio:

```
arp -s 192.168.0.125 00:40:8c:18:10:00 temp  
ping -s 408 192.168.0.125
```

4. Collegare l'alimentazione ad AXIS 241Q/241S.
5. Chiudere la sessione ARP Ping una volta visualizzato 'Reply from 192.168.0.125:...' (circa 10-15 secondi).
6. Avviare un browser Web e immettere l'indirizzo IP nel campo Indirizzo/Posizione.
7. Premere **Invio**.
8. Immettere una password per l'utente root (amministratore).
9. L'installazione è stata completata, procedere con *Using the video server*, alla pagina 14.

## Servizio AXIS Internet Dynamic DNS

Il servizio AXIS Internet Dynamic DNS offre una procedura che con un solo click rende AXIS 241Q/241S disponibile sulla rete locale e su Internet. Al momento dell'installazione, AXIS 241Q/241S riceve un URL (indirizzo Web) utilizzabile in seguito per accedervi. La registrazione per l'assistenza del server video può essere annullata in qualsiasi momento.

### Requisiti

Per utilizzare il servizio AXIS Internet Dynamic DNS sono necessari i seguenti requisiti:

- Un server DHCP collegato alla rete
- Una connessione a Internet che non necessiti di un server proxy per l'accesso HTTP.

### Procedura di installazione

Si noti che con questa procedura si invia l'indirizzo IP di AXIS 241Q/241S, la versione firmware, il tipo di prodotto e il numero di serie al servizio Axis Internet Dynamic DNS. Non vengono trasferite informazioni personali.

1. Collegare AXIS 241Q/241S alla rete locale mediante un cavo di rete standard (RJ-45).
2. Collegare l'alimentazione al server video.
3. Attendere che l'indicatore di stato sulla parte anteriore del server video emetta una luce verde fissa, segno che ha ricevuto un indirizzo IP dinamico da un server DHCP sulla rete.
4. Attendere 60 secondi, quindi premere una volta il pulsante di controllo sul pannello anteriore. La luce verde dell'indicatore di stato sulla parte anteriore del server video lampeggia mentre si connette al servizio AXIS Internet Dynamic DNS. Completato il processo di registrazione, la luce verde dell'indicatore ritorna fissa.
5. Visitare il sito Web [www.axiscam.net](http://www.axiscam.net) per essere guidati attraverso la parte restante dell'installazione. Tenere il numero di serie del prodotto a portata di mano ed seguire le istruzioni visualizzate sullo schermo.

Il numero di serie/indirizzo MAC (S/N) è riportato sull'etichetta che si trova sotto ad AXIS 241Q/241S

6. Immettere una password per l'utente root (amministratore).
7. Se necessario, accettare l'installazione di **AMC** sulla workstation.

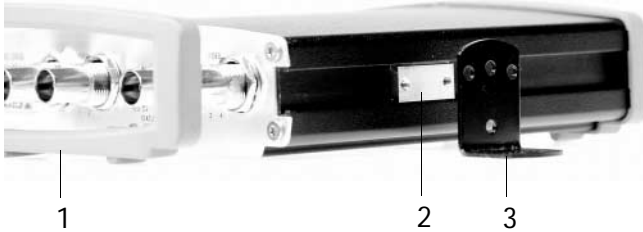
**Nota:** AMC deve essere installato per visualizzare le immagini dal vivo in Internet Explorer di Microsoft. Se l'ambiente di lavoro non consente l'aggiunta di componenti software, è possibile configurare AXIS 241Q/241S in modo da utilizzare un'applet Java per l'aggiornamento delle immagini. Vedere il file della Guida sotto Live View Config | Layout | Default Viewer for Internet Explorer (Config immagini dal vivo | Layout | Visualizzazione predefinita per Internet Explorer) per informazioni. Oppure utilizzare un altro browser Web supportato, vedere *Technical Specifications*, alla pagina 47.

8. L'installazione è stata completata, procedere con *Using the video server*, alla pagina 14.

## Instalación del AXIS 241Q/241S

### Montaje del AXIS 241Q/241S

El AXIS 241Q/241S se suministra con un kit especial para montaje de pared o en un bastidor. Siga las instrucciones siguientes para fijar el soporte de montaje en el servidor de vídeo:



1. Retire el armazón gris del panel frontal del servidor de vídeo (no necesita herramientas).

2. Introduzca las placas metálicas en las ranuras a cada lado del servidor de vídeo.

3. Ubique y fije los soportes a cada lado con los tornillos que se incluyen.

Los soportes de montaje se pueden ubicar para montar el servidor de vídeo en una superficie vertical o en un soporte (4U).

### Conexión de cámaras de vídeo al AXIS 241Q/241S

Conecte la salida de vídeo de su(s) cámara(s) al servidor de vídeo AXIS 241Q/241S utilizando un cable de vídeo coaxial de 75 ohmios con conectores BNC.

Nota: Utilice un convertidor de RCA a BNC si su cámara tiene un conector estándar tipo fono (RCA).



Cable BNC

### Instalación en una red

El AXIS 241Q/241S está diseñado para ser instalado en una red Ethernet. Esto supone asignar una dirección IP al servidor de vídeo, ya sea manualmente o a través de un servicio de red automatizado (DHCP). Seleccione uno de los procedimientos siguientes según su red:

- *Instalación manual utilizando AXIS IP Utility*, en la página 65
- *Instalación manual utilizando ARP y Ping en Windows*, en la página 66
- *Instalación manual utilizando ARP y Ping en UNIX/Linux*, en la página 67
- *AXIS Internet Dynamic DNS Service*, en la página 68

Notas:

- El AXIS 241Q/241S tiene la dirección IP por defecto 192.168.0.90
- El DHCP está habilitado por defecto.



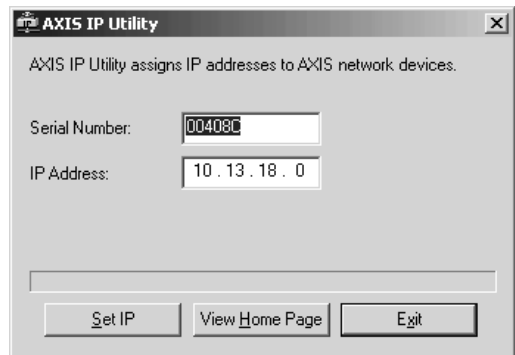
## Instalación manual utilizando AXIS IP Utility

AXIS IP Utility es una aplicación de software de Windows que instala el AXIS 241Q/241S en su red local utilizando una dirección IP estática.

- Descargue el software AXIS IP Utility en su ordenador, de forma gratuita desde las páginas de Asistencia Técnica en <http://www.axis.com/techsup/software>
- Haga doble clic en el archivo setup.exe y siga las instrucciones de la pantalla para instalar el software en su ordenador.

Siga las instrucciones siguientes para configurar la dirección IP manualmente utilizando AXIS IP Utility:

1. Obtenga una dirección IP para su AXIS 241Q/241S. (AXIS IP Utility detecta la sub-red a la que está conectado su ordenador. El AXIS 241Q/241S debe instalarse en la misma sub-red)
2. Conecte un cable de red RJ-45 estándar a su AXIS 241Q/241S y conéctelo a la red.
3. Conecte la alimentación al AXIS 241Q/241S.
4. Inicie AXIS IP Utility en su ordenador.
5. Ingrese el número de serie:



El número de serie/dirección MAC (S/N) está situado en la etiqueta en el lado inferior del AXIS 241Q/241S

6. Ingrese la dirección IP obtenida para su AXIS 241Q/241S y haga clic en Set IP.
7. Cuando se lo solicite AXIS IP Utility, reinicie el servidor de vídeo desconectando y reconectando la fuente de alimentación externa.
8. Aparece un mensaje confirmando que la dirección IP ha sido configurada, haga clic en OK.
9. Haga clic en View Home Page para acceder a las páginas Web de AXIS 241Q/241S.
10. Ingrese una contraseña para el usuario root (administrador).
11. Si se requiere, acepte la instalación de AMC en su estación de trabajo.

**Nota:** AMC debe instalarse para ver imágenes en vivo en Microsoft Internet Explorer. Si su entorno de trabajo limita componentes de software adicionales, Ud. puede configurar su AXIS 241Q/241S para que utilice Java applet para actualizar las imágenes. Vea el archivo de ayuda bajo Live View Config | Layout | Default Viewer para Internet Explorer. O utilice otro navegador de Web compatible, ver *Technical Specifications*, en la página 47.

12. La instalación ha finalizado, continúe en *Using the video server*, en la página 14.

## Instalación manual utilizando ARP y Ping en Windows

Asigne una dirección IP única a su producto desde un ordenador de su red, de la siguiente manera:

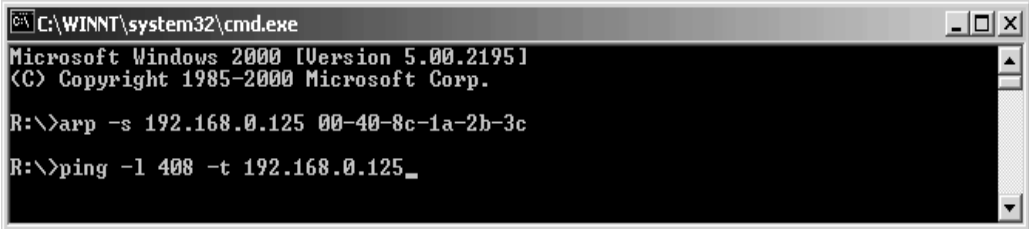
1. Obtenga una dirección IP sin utilizar para el AXIS 241Q/241S desde su administrador de red.
2. Conecte un cable de red estándar a su AXIS 241Q/241S y conéctelo a la red.
3. El número de serie/dirección MAC (S/N) está situado en la etiqueta en el lado inferior del AXIS 241Q/241S.
4. Desde un ordenador en su red, abra una línea de comando, es decir desde el menú Inicio de Windows, seleccione Ejecutar... y escriba cmd en el campo. Haga clic en OK.
5. Ingrese los comandos:

Sintaxis:

```
arp -s <Dirección IP> <Dirección MAC>
ping -l 408 -t <Dirección IP>
```

**Nota:** El comando ping está seguido de -l (en minúsculas L)

### Ejemplo



```
C:\WINNT\system32\cmd.exe
Microsoft Windows 2000 [Version 5.00.2195]
(C) Copyright 1985-2000 Microsoft Corp.

R:\>arp -s 192.168.0.125 00-40-8c-1a-2b-3c
R:\>ping -l 408 -t 192.168.0.125_
```

6. Conecte la alimentación al AXIS 241Q/241S.
7. Cuando aparezca 'Reply from 192.168.0.125: ...' (aproximadamente 10-15 segundos), escriba Ctrl+C para cerrar la sesión de ARP Ping.
8. Inicie un navegador Web e ingrese la dirección IP en el campo Ubicación/Dirección.
9. Presione Intro.
10. Ingrese una contraseña para el usuario root (administrador).
11. Si se requiere, acepte la instalación de AMC en su estación de trabajo.

**Nota:** AMC debe instalarse para ver imágenes en vivo en Microsoft Internet Explorer. Si su entorno de trabajo limita componentes de software adicionales, Ud. puede configurar su AXIS 241Q/241S para que utilice Java applet para actualizar las imágenes. Para más información, vea el archivo de ayuda bajo Live View Config | Layout | Default Viewer para Internet Explorer. O utilice otro navegador de Web compatible, ver *Technical Specifications*, en la página 47.

12. La instalación ha finalizado, continúe en *Using the video server*, en la página 14.

## Instalación manual utilizando ARP y Ping en UNIX/Linux

Asigne una dirección IP única a su producto desde un ordenador de su red, de la siguiente manera:

1. Obtenga una dirección IP no utilizada para el AXIS 241Q/241S desde su administrador de red.
2. Conecte un cable de red estándar a su AXIS 241Q/241S y conéctelo a la red.
3. Ubique el número de serie/dirección MAC (S/N) que está situado en la etiqueta en el lado inferior del AXIS 241Q/241S.

Sintaxis:

```
arp -s <Dirección IP> <Dirección MAC> temp
ping -s 408 <Dirección IP>
```

Ejemplo:

```
arp -s 192.168.0.125 00:40:8c:18:10:00 temp
ping -s 408 192.168.0.125
```

4. Conecte la alimentación al AXIS 241Q/241S.
5. Cierre la sesión de ARP Ping cuando aparezca 'Reply from 192.168.0.125: ...' (aproximadamente 10-15 segundos).
6. Inicie un navegador Web e ingrese la dirección IP en el campo Ubicación/Dirección.
7. Presione **Intro**.
8. Ingrese una contraseña para el usuario root (administrador).
9. La instalación ha finalizado, continúe en *Using the video server*, en la página 14.

## AXIS Internet Dynamic DNS Service

AXIS Internet Dynamic DNS Service proporciona un procedimiento de clic único que da acceso a AXIS 241Q/241S en su red local y a través de Internet. En la instalación, el AXIS 241Q/241S recibirá un URL (dirección web), que entonces se puede utilizar para accederlo. El servidor de vídeo se puede desinscribir del servicio en cualquier momento.

### Requisitos

Para utilizar el AXIS Internet Dynamic DNS Service se requiere lo siguiente:

- un servidor DHCP conectado a la red
- Una conexión Internet que no requiera un servidor proxy para acceso HTTP.

### Procedimiento de instalación

Tenga en cuenta que este procedimiento enviará la dirección de IP, versión de firmware, tipo de producto y número de serie de AXIS 241Q/241S al Axis Internet Dynamic DNS Service. No se transmitirá ninguna información de carácter personal.

1. Conecte el AXIS 241Q/241S a su red local, utilizando un cable de red (RJ-45) estándar.
2. Conecte la alimentación al servidor de vídeo.
3. Espere a que el indicador de Estado al frente del servidor de vídeo brille con luz verde fija, indicando que ha recibido una dirección IP dinámica de un servidor DHCP en su red.
4. Espere 60 segundos y pulse el botón de control en el panel frontal una vez. El indicador de estado al frente del servidor de vídeo parpadea con luz verde mientras se conecta a AXIS Internet Dynamic DNS Service. Una vez finalizado el proceso de inscripción, el indicador vuelve a brillar con luz verde fija.
5. Visite [www.axiscam.net](http://www.axiscam.net) dónde le guiarán a través del resto de la instalación. Sírvase tener listo el número de serie de su producto y siga las instrucciones de la pantalla.

El número de serie/dirección MAC (S/N) está situado en la etiqueta en el lado inferior del AXIS 241Q/241S

6. Ingrese una contraseña para el usuario **root** (administrador).
7. Si se requiere, acepte la instalación de **AMC** en su estación de trabajo.

**Nota:** AMC debe instalarse para ver imágenes en vivo en Microsoft Internet Explorer. Si su entorno de trabajo limita componentes de software adicionales, Ud. puede configurar su AXIS 241Q/241S para que utilice Java applet para actualizar las imágenes. Para más información, vea el archivo de ayuda bajo Live View Config | Layout | Default Viewer para Internet Explorer. O utilice otro navegador de Web compatible, ver *Technical Specifications*, en la página 47.

8. La instalación ha finalizado, continúe en *Using the video server*, en la página 14.

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