

# Network Camera

AXIS 2120

■ English ■ French ■ Spanish ■ German



Installation Guide v1.0 

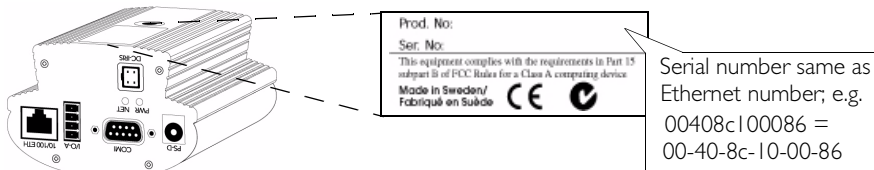
# Installing Your Camera to a Network

Follow the guide below to quickly install your AXIS 2120 to an Ethernet network:

## Important!

- For details on how to install the AXIS 2120 to a modem, see section *Installing Your Camera to a Modem*.
- If you are using your AXIS 2120 in an outdoor application, the unit must be housed in outdoor enclosure. Please refer to Axis' Website at: <http://www.axis.com> for suppliers details.

❶ Note the Serial number on the underside of the unit. You need to know this to set the IP address:



❷ Using an appropriate method for your operating system, assign your AXIS 2120 with a unique IP Address from a computer on your network, as follows:

**Windows 95/98 & NT only** - Start a DOS window and type these commands:

Syntax:

```
arp -s <Server IP address> <Ethernet address> <my PC IP address>
ping <Server IP address> -t
```

Example:

```
arp -s 172.21.1.200 00-40-8c-10-00-86 172.21.1.193
ping 172.21.1.200 -t
```

**UNIX only** - Type these commands in your command line:

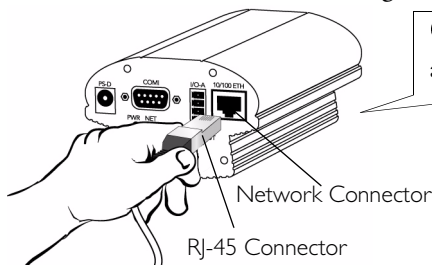
Syntax:

```
arp -s <IP address> <Ethernet address> temp
ping <IP address>
```

Example:

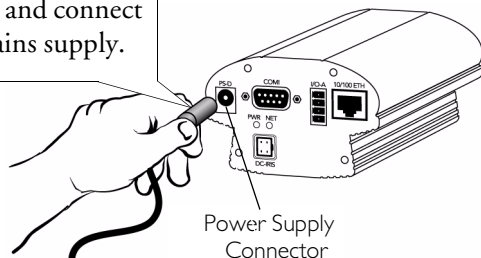
```
arp -s 172.21.1.200 00:40:8c:10:00:86 temp
ping 172.21.1.200
```

'Request timed out...' messages are now repeatedly returned within the DOS window.



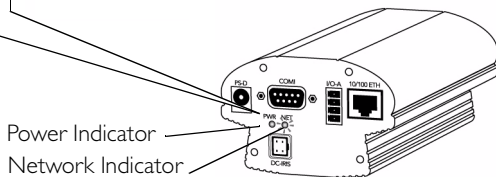
❸ Connect an Ethernet cable to your AXIS 2120 and attach it to the network.

❹ Attach the external Power Supply to the unit and connect it to your local mains supply.





❺ Approximately 10-15 seconds after connecting the power supply, the message 'Reply from 172.21.1.200...' - or similar, is returned within the DOS window. Ensure that the Power Indicator is permanently lit and that the Network Indicator flashes intermittently.

❻ Press Control-C to exit ping. The installation is now complete, and you are now ready to access the AXIS 2120 from your Web browser, as described in the next section...



## Verifying the Installation From Your Browser...

To access the **AXIS 2120 Home Page**, start your Web browser and enter the IP address in the location/address field, e.g 171.21.1.200.

Click the  **Installation Wizard** button. The wizard guides you through the remaining installation procedures and will help you configure your application. Detailed information on how to use the various product functions is conveniently provided in the  on-line help, available from configuration pages.

## Installing Your Camera to a Modem

The information in this section describes how to connect the AXIS 2120 to a serial modem for transmitting images over a normal Dial-up connection.

### Important!

- The information and screen examples featured within this section are specific to Windows NT. And, although similar to the Dial-up implementations in Windows 95, 98, and 2000, small deviations in the dialog instructions for other operating systems should be expected. Refer to your system information for further information on creating a Dial-up modem connection if you are using any other operating system.
- Windows Dial-up Networking and TCP/IP must be correctly installed prior to commencing with the modem cable connection. Detailed information on how to check this is provided in the Microsoft Windows Help.

## Connecting Your Computer Using the Null Modem Cable...

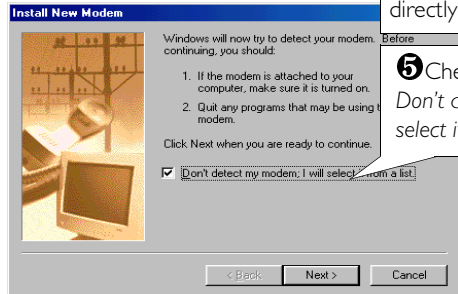
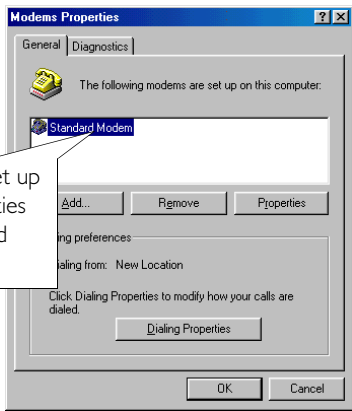
Follow the steps below to configure a serial modem connection for your AXIS 2120:

**1** Connect the supplied Null modem cable between the Serial Connector on the AXIS 2120 and the serial port on your computer.

**2** Connect the power supply to the camera server and check that the Power Indicator is lit.

**3** From the Start menu, open the Control Panel and double click the Modems icon.

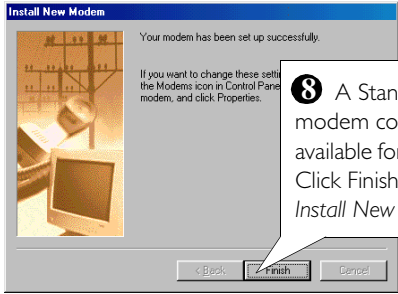
**4** If a Standard Modem is already set up and displayed in the Modem Properties dialog (see right) you should proceed directly to step 8.



**5** Check the dialog: *Don't detect my modem, I will select it from a list. Click Next>.*



**6** Select the Standard 28800 modem from the displayed list of modems. Click Next>.



**8** A Standard 28800 modem connection is now available for the AXIS 2120. Click Finish to close the *Install New Modem* wizard.

**7** Select the serial port to which your AXIS 2120 is now connected via the Null Modem cable. Click Next>.

**9** Click the Properties button to finally check that the displayed Communications Port is set correctly; that is, set to the same port as you have connected the AXIS 2120. Click OK.

**10** Click Close.

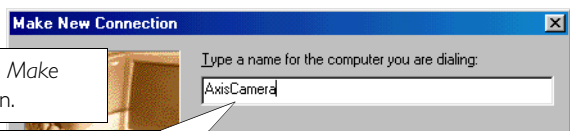
## Creating a Dial-up Networking Connection...

Follow the steps below to create a dedicated Dial-up networking connection to your AXIS 2120:

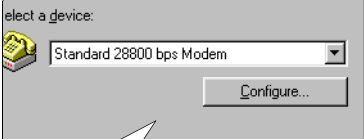
**1** Double click *My Computer* and then double click the *Dial-Up Networking* icon.



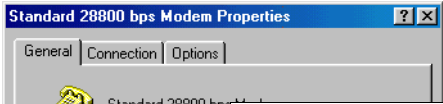
**2** Double click the *Make New Connection* icon.



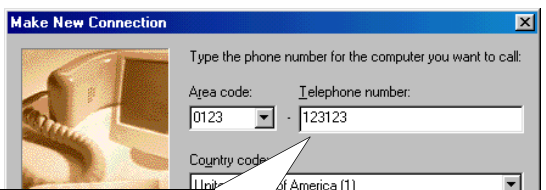
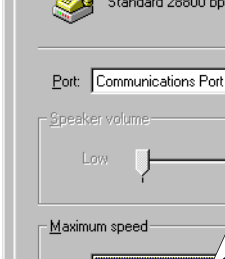
**3** Provide the connection with a name (*AxisCamera* is the name used in the subsequent examples).



**4** From the drop down dialog, select the *Standard Modem* previously created for the *AXIS 2120* as the selected device. Click *Configure...*

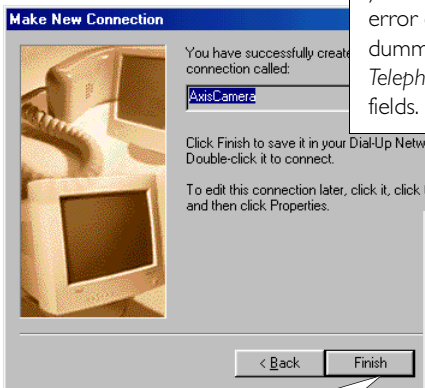


**5** To significantly improve the performance of your *AXIS 2120* when using the *Null-Modem* cable, set the *Maximum Speed* to *115200*.

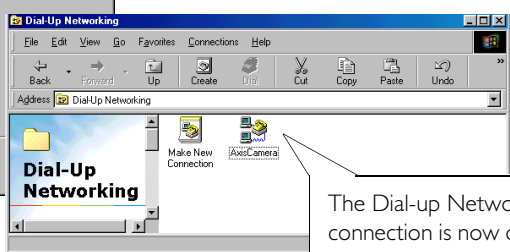


**6** Click *OK* to return to the *Make New Connection* dialog. Click *Next>*.

**7** The telephone numbers requested in the following dialog are not required for use in the logical connection to your camera. To bypass the wizard error correction to your camera, simply enter any dummy number into the *Area code*, *Telephone number* and *Country code* fields. Click *Next>*.



**8** You have now successfully created your dedicated Dial Up Networking connection for your *AXIS 2120*. Click *Finish*.



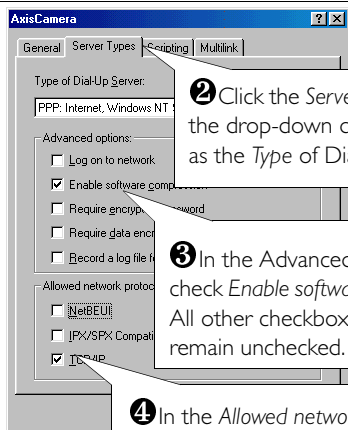
The Dial-up Network connection is now displayed. You are now ready to refine the Dial-Up networking properties, as described in the next section...

## Refining the Dial-up Networking Properties...

Having created the Dial-up connection for your AXIS 2120, follow the steps below to refine the connection properties:

**1** From the Dial-up Networking dialog, right click the dedicated Dial-up connection previously created for you camera (*AxisCamera* was the connection created used in this and previous examples). Select Properties.

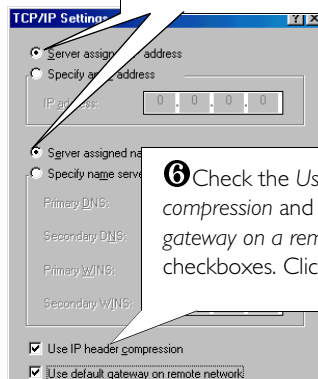
**5** Click TCP/IP settings and then check the *Server assigned IP address*, and *Server assigned name server addresses* radio buttons.



**2** Click the *Server Types* tag. From the drop-down dialog, select *PPP* as the *Type of Dial-Up Server*.

**3** In the *Advanced options* field, check *Enable software compression*. All other checkboxes should remain unchecked.

**4** In the *Allowed network protocols* field, check the *TCP/IP* checkbox. *NetBEUI* and *IPX/SPX* checkboxes should remain unchecked.



**6** Check the *Use IP header compression* and *Use default gateway on a remote network* checkboxes. Click *OK*.

**7** Click the *Scripting* tag and ensure that the *Start terminal screen minimized* checkbox is checked. Click *OK* to exit *Dial-Up Networking Properties*.

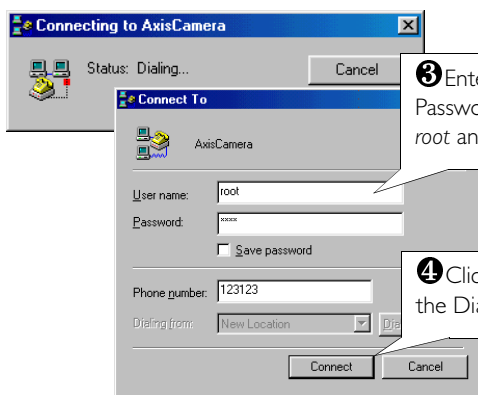
## Initiating the Dial-up Connection...

### Important!

Please ensure that the Null Modem Cable is correctly installed and that the relative connection properties are correctly configured prior to initiating a Dial-up connection. Step-by-step instructions on how to do this are provided on the preceding pages of this section

**1** Double click *My Computer* and then double click the *Dial-Up Networking* dialog.

**2** Double click the Dial-Up connection icon that was previously created for your AXIS 2120. *AxisCamera* was used in this and previous examples.

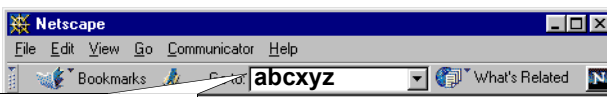


**3** Enter a Username and Password using the default root and pass respectively.

**4** Click *Connect* to initiate the Dial-Up connection.

## Verifying the Modem Connection...

Having initiated your Dial-up connection, as described above, you can quickly verify the integrity of the connection by accessing the AXIS 2120 using a standard Web browser; such as Netscape or Internet Explorer as follows:



1 Since the AXIS 2120 emulates a DNS server, type in any URL in the Location/Site field of your browser to display the AXIS 2120 Home Page, as defined below.

2 Now, configure the unit using the *Installation Wizard* or the *Administration Tools*.

## Reinstating the Factory Default Settings

In certain circumstances, it may be necessary to reinstate the **Factory Default** settings for your AXIS 2120. This is performed by clicking the appropriate button within the **Administration Tools**, *or* by pressing the **Control Button**. Follow the instructions below to reinstate the product factory default settings, using the Control button:

1. Switch off the AXIS 2120 by disconnecting the power cable.
2. Using a suitably pointed object, press and continue to hold the Control Button depressed.  
**Note:** The Control Button is located to the left of the lens on the front panel of the unit. While continuing to hold the Control Button depressed, reconnect the power supply cable.
3. When the Status Indicator is lit permanently yellow, release the Control Button. The unit will restart automatically after approximately 5 seconds.

Your AXIS 2120 is now reset to the original factory default settings.

**Note:** With the exception of the product Ethernet address, reinstating the original default settings causes all parameters (including the IP address) to be reset.

## Focusing Your Camera

If you are unable to view your video images directly from your chosen point of installation, follow the instructions below to achieve a good basic level of focus for your AXIS 2120:

1 Power on the AXIS 2120 and then wait at least 10 sec.

2 Turn the lens to its extreme Far-focus (F, ∞) position.

3 Enable the Focus Assistant: using a suitably pointed object, press and hold the Control Button - until the Status Indicator flashes **Yellow**.

4 Turn the lens to its extreme Near-focus (N) position.



5 Finally, turn the lens slowly towards the Far-focus (F, ∞) position - until the Status Indicator displays **Green**; that is, until a *Good* level of focus (>80%) is achieved.

6 Return to your browser application and review the picture quality. Repeat step 5 only if you consider the focal distance as too distant - until you are satisfied with both the focal-distance and focus-quality.

7 To exit the Focus Assistant: press and hold the Control button until the Status Indicator flashes **Yellow**. The Status Indicator displays **Green** when the Focus Assistant is closed.