



AXIS 2110 Network Camera

■ English ■ French ■ Spanish ■ German



Your Virtual Eye!

Installation Guide R1.0

Installing Your Camera on a Network

Follow the guide below to quickly install your AXIS 2110 on an Ethernet network:

Important!

For details on installing the AXIS 2110 to a modem, see page 2.

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

Windows 95, 98, NT and 2000 only - Start a DOS window and type these commands:

Syntax:

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

Example:

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

UNIX only - Type these commands in your command line:

Syntax:

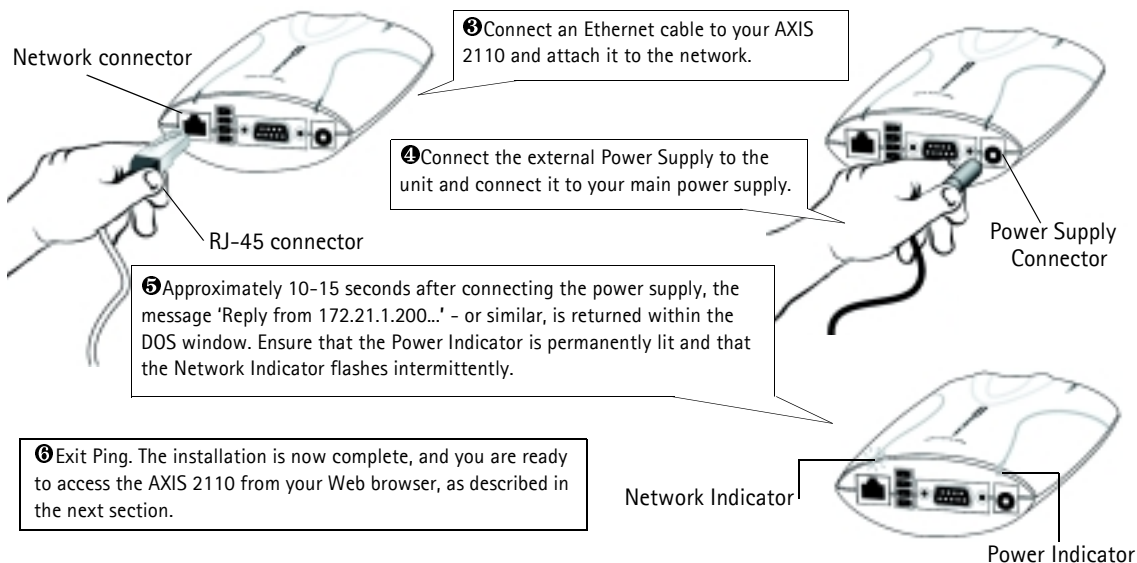
```
arp -s <IP address> <Ethernet address> temp
ping <IP address>
```

Example:

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


Note: In some Unix systems, the arp command can be located in a directory that is not on the command path; e.g: /usr/sbin/arp

You will now see 'Request timed out ...' messages repeatedly returned within the DOS window.



Verifying and Completing the Installation From Your Browser

To access the AXIS 2110 Home Page, start your browser and enter the IP address in the location/address field, e.g. 171.21.1.200.

Click the **Installation Wizard** link. 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 the configuration pages.

Installing Your Camera via a Modem

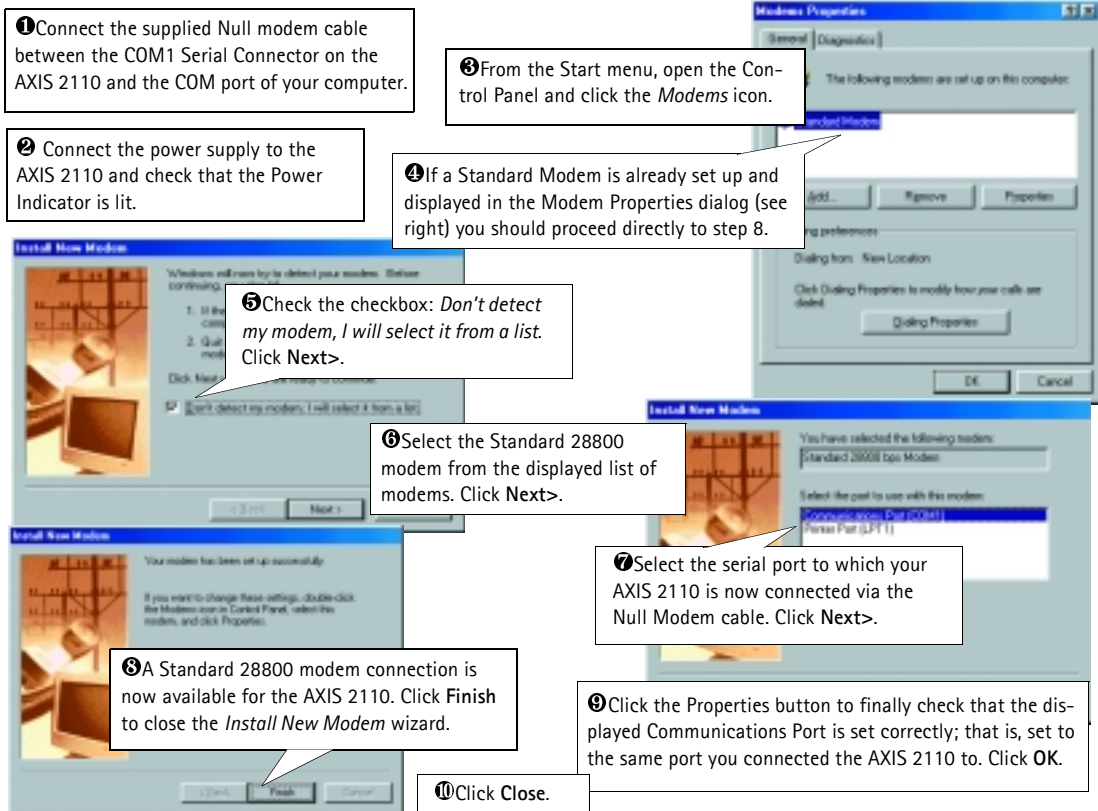
The information in this section describes how to connect the AXIS 2110 to a serial modem for transmitting images over a normal Dial-Up connection.

Important!

- The information and screen examples featured here are specific to Windows NT. 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 Windows Help.

Connecting Your Computer Using the Null Modem Cable

Follow the steps below to configure a serial modem connection for your AXIS 2110:



1 Connect the supplied Null modem cable between the COM1 Serial Connector on the AXIS 2110 and the COM port of your computer.

2 Connect the power supply to the AXIS 2110 and check that the Power Indicator is lit.

3 From the Start menu, open the Control Panel and 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 checkbox: *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*>.

7 Select the serial port to which your AXIS 2110 is now connected via the Null Modem cable. Click *Next*>.

8 A Standard 28800 modem connection is now available for the AXIS 2110. Click *Finish* to close the *Install New Modem* wizard.

9 Click the *Properties* button to finally check that the displayed Communications Port is set correctly; that is, set to the same port you connected the AXIS 2110 to. Click *OK*.

10 Click *Close*.

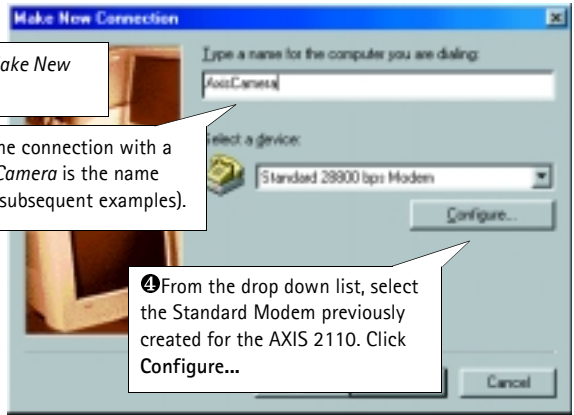
Creating a Dial-Up Networking Connection...

Follow the steps below to create a dedicated Dial-Up networking connection to your AXIS 2110:

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

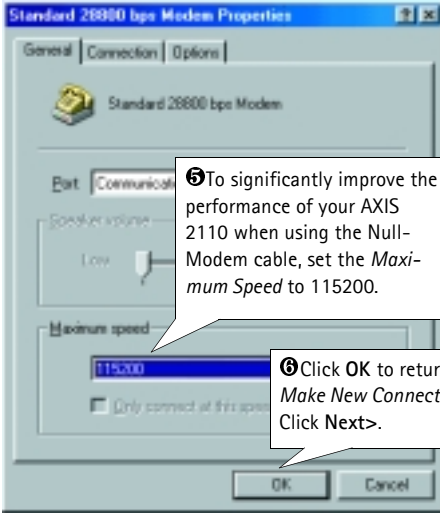


2 Double-click the *Make New Connection* icon.



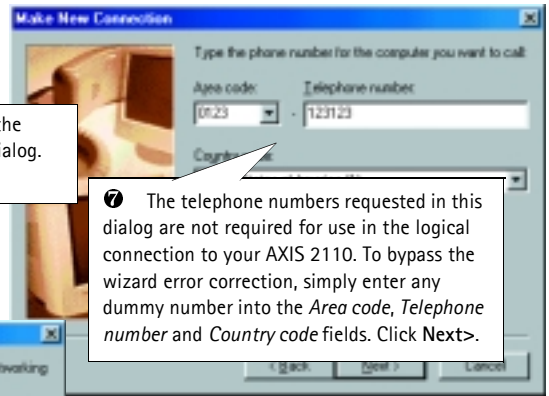
3 Provide the connection with a name (*AxisCamera* is the name used in the subsequent examples).

4 From the drop down list, select the Standard Modem previously created for the AXIS 2110. Click *Configure...*



5 To significantly improve the performance of your AXIS 2110 when using the Null-Modem cable, set the *Maximum Speed* to 115200.

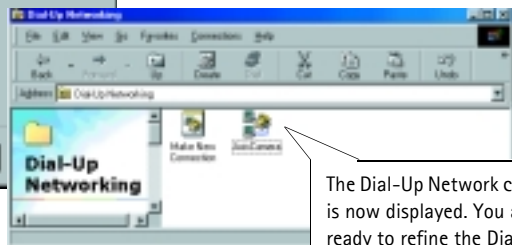
6 Click *OK* to return to the *Make New Connection* dialog. Click *Next>*.



7 The telephone numbers requested in this dialog are not required for use in the logical connection to your AXIS 2110. To bypass the wizard error correction, simply enter any dummy number into the *Area code*, *Telephone number* and *Country code* fields. Click *Next>*.



8 You have now successfully created a dedicated Dial Up Networking connection for your AXIS 2110. Click *Finish*.



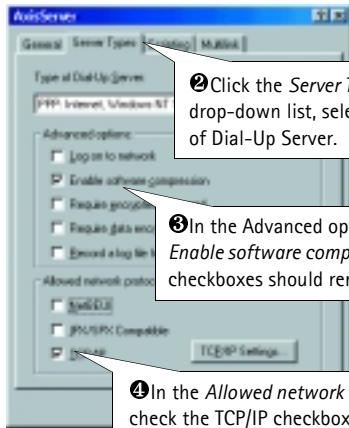
The Dial-Up Network connection is now displayed. You are now ready to refine the Dial-Up networking properties, as described in the next section.

Refining the Dial-Up Networking Properties...

Having created the Dial-Up connection for your AXIS 2110, follow the steps below to refine the connection properties:

❶ From the Dial-Up Networking dialog, right click the dedicated Dial-Up connection previously created for your AXIS 2110 (*Axis-Camera* was the connection created used in this and previous examples). Select **Properties**.

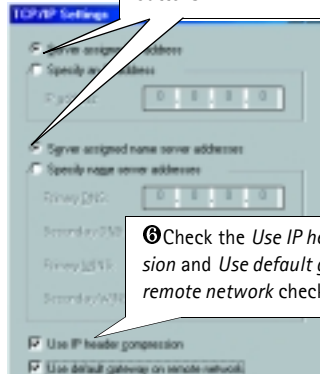
❺ Click TCP/IP settings and then check the *Server assigned IP address*, and *Server assigned name server addresses* radio buttons.



❷ Click the **Server Types** tab. From the drop-down list, select **PPP** as the *Type of Dial-Up Server*.

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

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



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

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

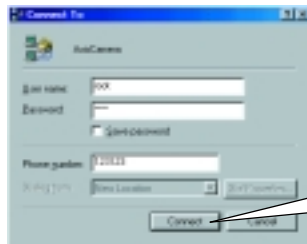
Initiating the Dial-Up Connection...

Important!

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

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

❷ Double-click the Dial-Up connection icon previously created for your AXIS 2110 (*AxisCamera* in this and previous examples).



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

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

Verifying the Modem Connection...

Having initiated your Dial-Up connection as described above, you can quickly check the connection by accessing the AXIS 2110 from a standard browser; such as Netscape or Internet Explorer, as follows:



❶ Since the **AXIS 2110** emulates a **DNS server**, you can type in any **URL** (that includes a period) into your browser to display the **AXIS 2110 Home Page**, as shown here.

❷ 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 2110. 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 2110 by disconnecting the power cable.
2. Press and hold the Control Button depressed, and reconnect the power supply cable.
3. Continue to keep the Control Button pressed until the Status Indicator displays *yellow* (note that this may take up to 15 seconds), then release the Control Button. When the Status Indicator displays *green* (which can take up to 1 minute) the AXIS 2110 will then have been reset to the original factory default settings.

Note: Reinstating the original default settings causes all parameters (including the IP address) to be reset.

Mounting and Focusing Your Camera

The AXIS 2110 can be mounted on the supplied mounting assembly, or installed into a weatherproof enclosure for use in outdoor applications. For further information on outdoor enclosures, follow the camera accessory links at the Axis website at www.axis.com

Having mounted the AXIS 2110, focus the camera following the instructions below:

Important!

Although the AXIS 2110 is intended for indoor and outdoor use, it is important to note that the charged coupled device (CCD) in the camera can become permanently damaged if it is exposed to too much direct sunlight, or halogen light. Therefore, it is important that the Iris Adjustment Ring is not set fully open when installing the camera in bright light conditions. The Axis warranty does not cover CCD damage caused by prolonged exposure to strong light.

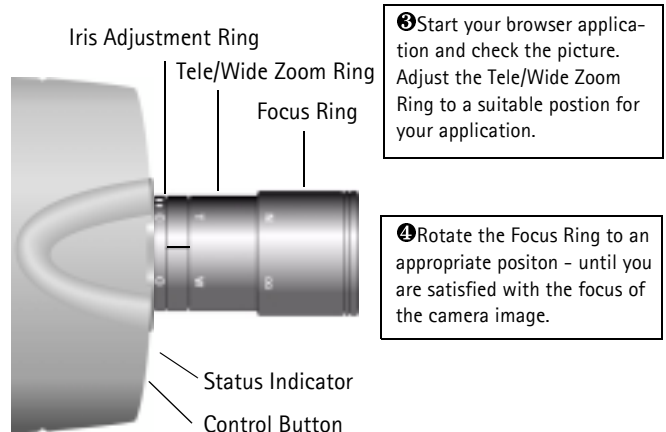
Tip! When mounting the camera behind glass, make sure that the camera lens is not too far away from the glass - particularly when installing the unit in an outdoor enclosure. This will help reduce undesirable reflection within the image.

❶ Power-on the AXIS 2110 and wait 10 seconds.

❷ The Iris Adjustment Ring effectively closes and opens the camera lens to regulate the amount of light entering the camera. Closing the ring reduces the amount of light; this protects the CCD and gives a better depth of field, i.e. focus over a greater distance. A more open lens provides better results in low-light conditions.

Rotate the Iris Adjustment Ring to an appropriate position for your chosen installation, as follows:

- indoor scene - fully open (0)
- outdoor scene - mid position (between C and 0)



❸ Start your browser application and check the picture. Adjust the Tele/Wide Zoom Ring to a suitable position for your application.

❹ Rotate the Focus Ring to an appropriate position - until you are satisfied with the focus of the camera image.