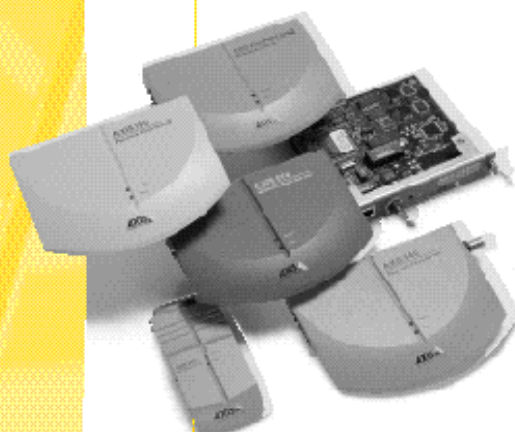


Axis Print Servers

**High Performance Multiprotocol
Print Servers for Virtually All Networks**



U s e r ' s M a n u a l



Preface

Thank you for purchasing the AXIS Network Print Server. Our goal in developing this product is to enable you to connect your bubble jet printer anywhere in your network, allowing all network users access to shared printer resources.

About Axis

Axis Communications is dedicated to providing innovative solutions for the network connection of computer peripherals. Since the start in 1984, it has been one of the fastest growing companies in the market and is now a leader in its field. The headquarters are located in Lund, Sweden, with subsidiaries in Beijing, Boston, Hong Kong, London, Paris, Shanghai, Singapore and Tokyo.

Axis Communications has a distributor network operating in more than 60 countries world-wide, marketing four major product lines:

Network Print Servers. These intelligent Ethernet and Token Ring print servers support a wide range of LAN protocols. The AXIS PrintPoint 140 BJC, 150, 152, 540, 542, 560, 570 and 570 MIO are Ethernet print servers, while the AXIS 640, 642, 660, 670 and 670 MIO are Token Ring print servers. The new AXIS PrintPoint 560/100 and AXIS PrintPoint 1P 560/100 Print Servers support 10baseT (Ethernet) or 100baseTX (Fast Ethernet) technology.

Network CD-ROM Servers. Multi-protocol CD-ROM servers provide a flexible and cost efficient solution for sharing CD-ROMs across the network. The AXIS StorPoint CD is available as standalone and tower module in both Ethernet and Token Ring versions. The tower module variant is also available in a 100Mbps Fast Ethernet version.

Network Camera Servers. The AXIS NetEye 200 Network Camera is a digital camera with built-in Web server that supports TCP/IP and Internet-related protocols. Connecting directly to Ethernet, it produces high quality pictures that can be published around the globe, over Internet and intranet networks.

IBM Mainframe and S/3x – AS/400 Printer Interfaces. These products include a wide range of plug-in interfaces and stand-alone products such as the AXIS Cobra+, AXIS 330/370 Cobra, AXIS HP MIO, the AXIS AFP IPDS-to-PostScript converter and the AXIS AFP MIO/IOP IPDS-to-PCL converters.



About this manual

This manual will guide you through simple step-by-step installation and setup procedures.

Introduction - The AXIS PrintPoint 140 BJC Print Server, how it works, where to use it, its main features.

Basic Installation - How to connect your AXIS PrintPoint 140 BJC to your Bubble Jet printer and network.

Setting Up... - Three sections; one for each of the network environments for your AXIS PrintPoint 140 BJC.

Every care has been taken in the preparation of this manual; if you detect any inaccuracies or omissions, please inform us at the address on the back cover. Axis Communications AB cannot be held responsible for any technical or typographical errors and reserves the right to make changes to the product and manuals without prior notice.

Electromagnetic Compatibility (EMC) notices

USA

This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instruction manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A 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 own expense will be required to take whatever measures may be required to correct the interference. Shielded cables should be used with this unit to ensure compliance with the Class A limits.

Europe



This digital equipment fulfils the requirements for radiated emission according to limit B of EN55022/1994, and the requirements for immunity according to EN50082-1/1992 residential, commercial, and light industry. (Compliance is not valid for unshielded network and printer cables.)

Trademark acknowledgements

AIX, Apple, Bubble Jet, Chimera, DEC, DOS, Ethernet, EtherTalk, HP, IBM, Internet Explorer, LAN Manager, LAN Server, Macintosh, Microsoft, MVS, Netscape, Novell NetWare, OS/2, OS/400, PostScript, PS/2, SCO, TokenTalk, UNIX, VM, VMS, VSE, Windows are registered trademarks of the respective holders.

AXIS PrintPoint 140 BJC User's Manual

Revision 1.0

Part No: 15637

Dated: September 1997

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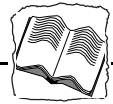
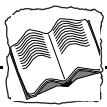


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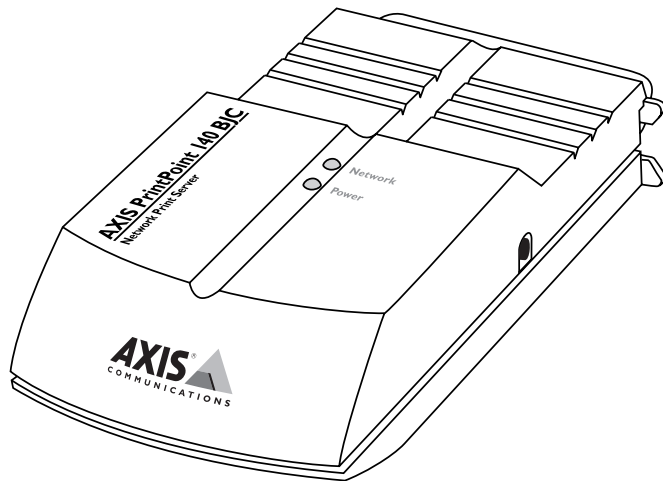


Section I Introduction

Connecting directly to Bubble Jet printers, the AXIS PrintPoint 140 BJC facilitates printer connections to anywhere on your network and provides network users with easy access to the available print resources. Its powerful built-in features make it extremely user friendly and very easy to install.

Physical Connection

The AXIS PrintPoint 140 BJC is suitable for Ethernet networks. It connects to the network via a twisted pair (10baseT) cable.



The AXIS PrintPoint 140 BJC Network Print Server

Environments

Using state-of-the-art technology, it offers advanced TCP/IP support and excellent print flexibility. It supports NetWare including NDS, Windows for Workgroups, Windows 95, Windows NT, LANtastic and OS/2 simultaneously.

Furthermore, it supports the HTTP protocol over TCP/IP, which means that it can be reached over Internet/intranet networks using any standard Web browser, e.g. Netscape Navigator, Microsoft Internet Explorer, Chimera, etc.



Data Communication

The AXIS PrintPoint 140 BJC is designed for use on 10 Mbps Ethernet networks.

Printer Ports

The AXIS PrintPoint 140 BJC is provided with a single high-speed parallel port, that can connect directly into the parallel port of the Bubble Jet printer. A Centronics-to-Centronics extension cable may be obtained from your local distributor for use with printers physically unable to directly accommodate the AXIS PrintPoint 140 BJC. Refer to *Appendix E - How To Contact Axis*.

Information

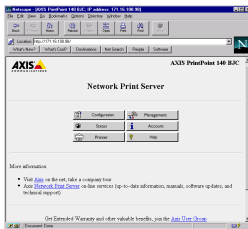
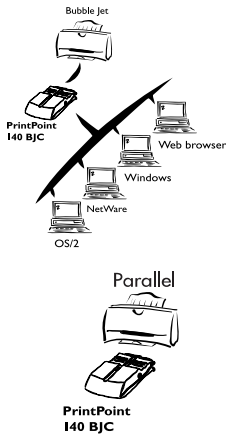


For more detailed information that is not included in this manual, you are invited to visit our WWW Home Page, where you can download further technical information. You may also download on-line manuals, tools such as the Acrobat Reader and the latest versions of the software utilities. Naturally enough, links to this information are provided from within the AXIS PrintPoint 140 BJC Web pages.

Your Axis dealer will also be pleased to provide you with any additional information or assistance that you might require. For details on the appropriate WWW address in your region, please refer to *Appendix E - How To Contact Axis*.



How it Works



Because of the different types of computers and operating systems employed in today's modern computing environment, it is common for print data to be communicated over a network using a variety of different transport protocols.

The AXIS PrintPoint 140 BJC Print Server is able to detect which protocol is being used for each print job, and then adapt the print data into a form suitable for the target printer.

As the AXIS PrintPoint 140 BJC is a pocket-sized print server which plugs directly in to the printer's parallel port, there is no need for additional cabling.

Installation of the AXIS PrintPoint 140 BJC and its integration into the network is performed using one of the Axis software packages; AXIS Print Monitor, AXIS Print Utility for Windows, AXIS Print Utility for OS/2, or AXIS NetPilot™.

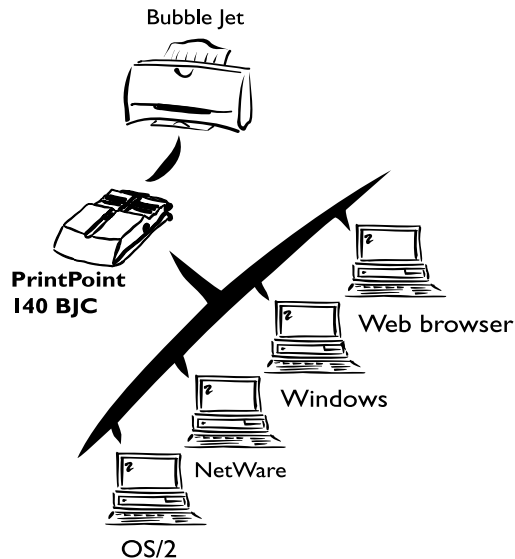
Furthermore, if you are using the TCP/IP network transport protocol and have access to a Web browser, you may also configure and view the status of your AXIS PrintPoint 140 BJC using HTTP, regardless of your type of platform.

The AXIS NetPilot™ software supplied with the AXIS PrintPoint 140 BJC on the AXIS Utilities diskette, makes the job of installation and configuration quick and convenient. AXIS NetPilot™ runs on Windows platforms, and provides a quick installation facility so that the AXIS PrintPoint 140 BJC can be rapidly put to use. It also provides user friendly facilities for tuning the configuration in accordance with your networking environment and allows you to maintain optimum printing performance, even whilst making changes to your network.





Where to use it



Web Browser

Because the AXIS PrintPoint 140 BJC comprises its own built-in Web server, it may be configured and managed directly from its own Web pages, using HTTP over a TCP/IP network. Access to the AXIS PrintPoint 140 BJC via a Web browser affords the user with a platform-independent management tool that is suitable for all of the supported network environments.

Environments

The AXIS PrintPoint 140 BJC can communicate with several major computer systems and network protocols. These different protocols can be handled simultaneously making the AXIS PrintPoint 140 BJC the ideal print server solution for mixed computing environments.

NetWare Environment

AXIS NetPilot™ is the preferred utility for installing and integrating the AXIS PrintPoint 140 BJC into a NetWare environment. The AXIS PrintPoint 140 BJC can be operated in both Print Server Mode and Remote Printer Mode.



It is compatible with both NetWare 4.10 NDS and bindery emulation, as well as NetWare 3.11, 3.12.

In Print Server Mode, the AXIS PrintPoint 140 BJC emulates a NetWare Print Server, while in Remote Printer Mode it emulates a workstation running RPRINTER or NPRINT. Logical printers are supported in both bindery and NDS modes for both PSERVER and NPRINT.

Windows Environments Unless you wish to change the default name of your AXIS PrintPoint 140 BJC, the setup operation within the Windows environment may be performed solely with the AXIS Print Monitor, or the AXIS Print Utility for Windows. Windows 3.1, Windows for Workgroups, Windows 95 and Windows NT are all supported. The AXIS PrintPoint 140 BJC is also fully compatible with Windows clients operating on LANtastic networks.

The AXIS Print Monitor supplied on the AXIS Utilities diskette, is the recommended tool for network printing within Windows 95 and Windows NT environments. It allows users to connect AXIS Network Print Servers in the same simple fashion as any local printer port. Pop-up messages can also be appropriately displayed to show the status of the peer-to-peer print jobs.

Use the AXIS Print Utility for Windows supplied on the AXIS Utilities diskette for printing within Windows for Workgroups and Windows 3.1 environments.

OS/2 Environments Unless you wish to change the default name of your AXIS PrintPoint 140 BJC, the setup operation in an OS/2 environment may be performed solely with the supplied AXIS Print Utility for OS/2.

Use the AXIS Print Utility for OS/2 to install and integrate the AXIS PrintPoint 140 BJC into the OS/2 spool system. The printers attached to the AXIS PrintPoint 140 BJC will then appear to be directly connected to the file server, and may be used by any client on your network.



Supported printers

Use the AXIS PrintPoint 140 BJC with Canon Bubble Jet printers. A network capable printer driver must be used. Extended printer status is available for certain models. Neither laser printers nor Windows Printing System are supported.

Main Features

Reliability The AXIS PrintPoint 140 BJC hardware provides high performance and reliability combined with low power consumption. The electronic circuits are based on the proven AXIS ETRAX chip that comprises an integrated 32 bit RISC processor and associated network controllers.

Flexibility It supports NetWare, Windows 95, Windows NT, Windows for Workgroups, and OS/2 simultaneously.

Speed The AXIS ETRAX chip has been specifically designed for LAN products and benefits users with a significantly faster throughput than a direct PC-to-printer connection. With a sustained data throughput of up to 390 kbytes per second, the AXIS PrintPoint 140 BJC is fast. High speed Centronics communication such as Hewlett-Packard Fast Mode, High Speed and IBM Fast Byte is supported.

Easy to Install Without being a “computer expert”, you can install the AXIS PrintPoint 140 BJC in minutes, allowing you to quickly realize the benefits afforded by workgroup printing. The AXIS NetPilot™ installation software includes a user friendly Installation Wizard, which allows installation into all of the AXIS PrintPoint 140 BJC networking environments.

For TCP/IP networks, your favorite Web browser may also act as a convenient configuration tool. Links provided within the AXIS PrintPoint 140 BJC Web pages allow modification of the configuration parameters and quick access to useful information.



- Security** You may set up passwords for all users, restricting both login and printer access.
- Monitoring** The provided AXIS NetPilot™ software allows you to continuously monitor printer status.
- The AXIS Print Monitor for Windows 95 and Windows NT also enables appropriate pop-up messages to be displayed to show the status of peer-to-peer print jobs.
- Futureproof** The AXIS PrintPoint 140 BJC has the ability to have its Flash memory updated. This allows you to quickly update and enhance the operational features of your AXIS PrintPoint 140 BJC when new print server software becomes available.
- All software updates are free of charge. You may perform the update operation over the network which makes the job of updating your AXIS PrintPoint 140 BJC quick and easy.
- Pocket-sized** The AXIS PrintPoint 140 BJC is equipped with one high-speed parallel port that plugs directly into the printer's parallel port.



Section I: Introduction



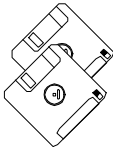
Section 2 Basic Installation

Checking and Identifying the Hardware

Unpack and check all the items using the check list below. Please contact your dealer if anything is missing or damaged. All packing materials are recyclable:



- ☐ AXIS PrintPoint 140 BJC, part no: 0074-2
- ☐ AXIS PrintPoint 140 BJC User's Manual, part no: 15637
- ☐ AXIS PrintPoint 140 BJC User's Printing Guide, part no: 15639
- ☐ AXIS PrintPoint 140 BJC Quick Installation Guide, part no: 15624
- ☐ Product Brochure, part no: 14412
- ☐ AXIS User Group Registration Card, part no: 15119
- ☐ 3.5" AXIS Utilities disk comprising the AXIS NetPilot™ Configuration Software, AXIS Print Monitor for Windows 95 & Windows NT, AXIS Print Utility for Windows, part no: 15425
- ☐ 3.5" OS/2 Utilities disk with AXIS Print Utility for OS/2, part no: 14232
- ☐ Power Supply:



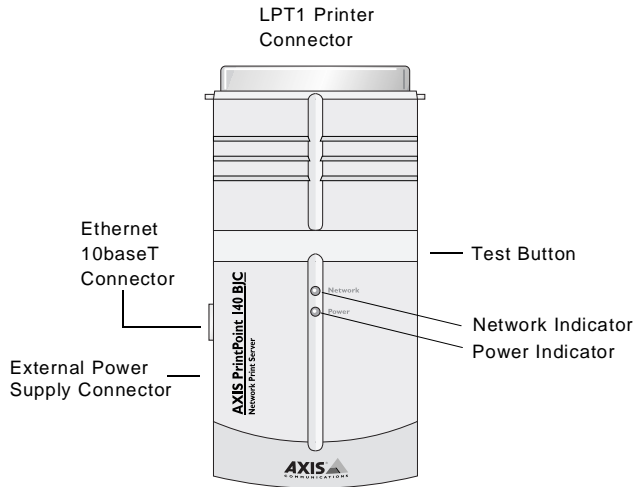
Part no.	AXIS PS-A
Europe	13599
UK	12866
Australia	12867
USA	12919
Japan	13249

Optional accessories

- ☐ Self-adhesive velcro ribbons, part no: 13282 and 13283
- ☐ Printer cable extension, part no: 13522



AXIS PrintPoint 140 BJC Connectors



Plan view of the AXIS PrintPoint 140 BJC

Test Button

The test button is used for:

- Printing a test page to check the connection to the printer.
- Printing the parameter list showing all the AXIS PrintPoint 140 BJC settings.
- Resetting the AXIS PrintPoint 140 BJC parameters to the factory default settings.

Refer to *Appendix A - The Test Button* for more information about printing and resetting the parameters.

Network Indicator

This flashes to indicate network activity.

Power Indicator

The Power Indicator is normally on while power is applied. If it is not lit, or it flashes, there is a problem with the AXIS PrintPoint 140 BJC or its power supply.



Connecting Printers to the AXIS PrintPoint 140 BJC

Caution

Make sure that the external power supply is marked with the correct mains voltage.

Connect a Printer:



1. Switch off the printer.
2. Connect the AXIS PrintPoint 140 BJC to the printer, either directly to the parallel printer port, or using the optional velcro ribbons and printer cable extension.
3. Connect the external power supply to the AXIS PrintPoint 140 BJC. The Power Indicator should now be permanently lit and the Network Indicator will start to flash during the power up and self test routines. The AXIS PrintPoint 140 BJC is ready for use when the Network Indicator stops flashing and remains off.

Test the Connection:



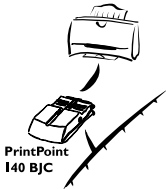
1. Switch on the printer.
2. Press and release the test button on the AXIS PrintPoint 140 BJC to print a test page.

The test page shows the most important parameters as well as the firmware version number. For some types of printers, the printer's internal test page will be printed instead of the print server's test page.

However, all you need to be concerned with at this stage is whether the test page has printed satisfactorily or not.

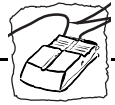


Connecting AXIS PrintPoint 140 BJC to the Ethernet Network



1. Switch off the printer and disconnect the AXIS PrintPoint 140 BJC external power supply.
2. Note the AXIS PrintPoint 140 BJC serial number found on the underside label of the print server. You need this number during the network configuration.
3. Connect your AXIS PrintPoint 140 BJC to the network using a twisted pair (10baseT) cable.
4. Switch on the printer and connect the external power supply to the AXIS PrintPoint 140 BJC.
5. Successful connection of the AXIS PrintPoint 140 BJC to your network will be confirmed by the intermittent flashing of the Network Indicator.
6. You are now ready to install your server onto your network using one of the methods detailed in the *Installation Guide*, on page 17. By commencing with the preferred installation method, you can further verify that your AXIS PrintPoint 140 BJC is properly connected to your network.

Note: ☐ Each AXIS PrintPoint 140 BJC Print Server is pre-configured with a unique Node Address that is identical to the serial number. This can be changed using the AXIS NetPilot™, or any standard Web browser using HTTP, if required.



Basic Set Up of the Network

Installation Guide

After connecting the AXIS PrintPoint 140 BJC to your network, you are now ready to perform the basic setup procedures. The method of installation that you choose should be dictated by your printing requirement and the type of network into which you are integrating. Proceed with an appropriate installation method from the list below:

- NetWare**
- If you have access to a Windows platform which uses NetWare you should firstly follow the procedures defined in:
 - *Basic Set Up with AXIS NetPilot*, on page 19.
 - *Section 3 Setting Up - NetWare*

- Windows**
- If your Windows platform uses NetBIOS/NetBEUI, use the NetPilot™ only if you want to change the default print server name. If this is unnecessary, proceed directly to:
 - *Section 4 Setting Up - Windows*

If your Windows platform uses neither NetWare nor NetBEUI, you must initially perform the basic TCP/IP setup procedures, as defined in:

- *Basic Set Up for TCP/IP*, on page 22.
- *Windows NT LPD Printing, Section 4*

- OS/2**
- If your network uses OS/2 workstations, use the AXIS NetPilot™ only if you want to change the default print server name. If this is unnecessary, proceed directly to:
 - *Section 5 Setting Up - OS/2*

Web Based Management

If you are using the TCP/IP protocol suite and also have access to a Web browser, you may manage the AXIS PrintPoint 140 BJC Print Server using HTTP, regardless of your system platform. Should you wish to use this easy-to-use configuration method, you should initially refer to:

- *Basic Set Up for TCP/IP*, on page 22. Refer then to:
- *Section 6 Web Based Management*



Installation Summary

The appropriate Installation, Management and Configuration tools for the AXIS PrintPoint 140 BJC can be summarized in the following table:

Operating System Protocols	Installation	Configuration/ Management
IPX/SPX (NetWare)	AXIS NetPilot	AXIS NetPilot™
TCP/IP (Windows)	Use LPD Monitor/Spooler (*)	Web browser
NetBIOS/NetBEUI (Windows 95/NT)	AXIS Print Monitor	AXIS NetPilot™
NetBIOS/NetBEUI (Windows)	AXIS Print Utility for Windows	AXIS NetPilot™
NetBIOS/NetBEUI (OS/2)	AXIS Print Utility for OS/2	AXIS NetPilot™

Recommended tools for the AXIS PrintPoint 140 BJC

- * You may use the resident LPD monitor in Windows NT to print via TCP/IP. A shareware LPR spooler is available for Windows 95, or Windows for Workgroups. You can download this software from <http://www.axis.com/techsup/>.

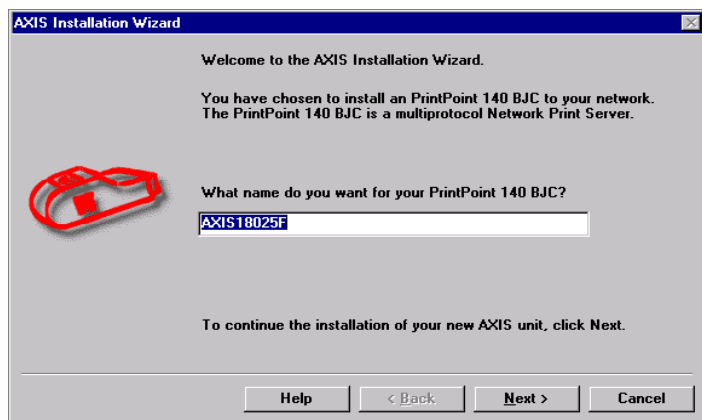
- Notes:**
- ☐ IPX/SPX: used in Novell NetWare
 - ☐ TCP/IP: used in Windows NT, Windows 95, Windows 3.11, Windows for Workgroups...
 - ☐ NetBIOS/NetBEUI: used in Windows NT, Windows for Workgroups, Windows 95, and LAN Server (OS/2)



Basic Set Up with AXIS NetPilot

Follow the instructions on the AXIS Utilities diskette label to install the AXIS NetPilot™ software on to your computer. AXIS NetPilot™ runs on any of the Windows platforms: Windows 3.x, Windows 95, Windows NT, Windows for Workgroups, or in a WinOS/2 window under OS/2.

When AXIS NetPilot™ is started, the program searches the network for new Axis units that have not yet been installed. If any new units are found, the user is given the option of installing them. To proceed, start the Installation Wizard.



The AXIS Installation Wizard Main window

The user is guided through the installation process by a Wizard which asks for the relevant information concerning your network environment. You will find more information about AXIS NetPilot™ in *Section 3 Setting Up - NetWare*.

Wizard

A special form of user assistance that automates a task (in this case the installation) through a dialog with the user. Wizards help the user to accomplish tasks that are complex and require experience, and even for the experienced user can help to speed up an operation.



Environments

You may choose which networking environments you want to configure the AXIS PrintPoint 140 BJC for, i.e. NetWare, Windows or OS/2. If your network comprises various different platforms you can, if you wish, enable all three environments.

NetWare NDS

You may place NetWare Print Queues on a specific bindery server, or alternatively into an NDS Tree.

Print Queues

The default Print Queue names and print server port names comprise of the print server name followed by the printer port.

Environment	Default Names
NetWare	AXIS1A0003_LPT1_Q
Windows & OS/2	AX1A0003.LP1

Default Print Queue Names and Print Server Port Names
for each of the operating environments

If you wish, the Installation Wizard allows you to amend the default names.

The Internet Address

During the installation process, you may choose the method the AXIS PrintPoint 140 BJC employs for obtaining an Internet Address. ARP, RARP, BOOTP and DHCP are supported. Refer to *page 24*, for more information on these methods.

Test Page

The final user prompt in the Installation Wizard allows you to print a test page through NetWare. This page displays the name of all the NetWare servers the AXIS PrintPoint 140 BJC is connected to and shows the status of each connection. This will assist diagnosis in the event of a configuration error.

- Notes:**
- ☐ The parameters entered during installation are not permanent; they can be altered at any time according to your network printing requirements.



- ❑ No serious or permanent damage will be caused if you make a mistake during installation. If at any time you find that printing is not satisfactory, the parameters can easily be changed to tune the system to your requirements.
- ❑ For information on advanced functions, please refer to the AXIS Network Print Server Technical Reference. You may download this or other technical information over the Internet by accessing the Axis WWW Home Page at <http://www.axis.com/>. Refer also to *Appendix E - How To Contact Axis*.

Additional References

Refer to one or more of the following sections to learn how you might fine tune the AXIS PrintPoint 140 BJC configuration and manage your network printing. Proceed as is appropriate to your type of network.

Section 3 Setting Up - NetWare

Section 4 Setting Up - Windows

Section 5 Setting Up - OS/2

Section 6 Web Based Management



Basic Set Up for TCP/IP

To establish communication with the TCP/IP network, an Internet address and a host name must be mapped to the Ethernet address of your AXIS PrintPoint 140 BJC Print Server. To do this, you must firstly acquire an unused Internet address from your Network Administrator, and decide upon an appropriate and unique name for your AXIS PrintPoint 140 BJC. This information must then be included into your system host table. The procedures for doing this are described below.

Before you start

- | | |
|--------------------------|---|
| System privileges | You will need root privileges on your UNIX system, or administrator privileges on a Windows NT server. |
| Ethernet address | You will need to know the Ethernet address of your AXIS PrintPoint 140 BJC to perform the installation. The Ethernet address is based upon the serial number of your AXIS PrintPoint 140 BJC. This means that an AXIS PrintPoint 140 BJC with a serial number of 00408C100086, will have a corresponding Ethernet address of 00 40 8C 10 00 86. The serial number of your unit is located on the underside label of the unit. |



The Internet Address and Host Name in Your Host Table

Enter the Internet address and Host name into your host table using the following step-by-step instructions:

1. Acquire an unused Internet address from your Network Administrator and decide upon an appropriate and unique name for your AXIS PrintPoint 140 BJC.
2. Add the Internet address and host name to your system host table. On most systems, this is done by appending the following line to the `/etc/hosts` file:

<code><Internet address></code>	<code><host name></code>
---------------------------------------	--------------------------------

Example:

<code>192.168.3.191</code>	<code>npsname</code>
----------------------------	----------------------

3. Update your Alias Name data base. If your system utilizes alias name data bases such as Yellow Pages (YP) or Network Information Services (NIS), you should update these. On most systems this is done by entering the following commands:

<pre>cd /var/yp make</pre>

Caution

DO NOT use the default or example Internet address when installing your AXIS PrintPoint 140 BJC. Always consult your Network Administrator before assigning an Internet address.



Set the Internet Address and Host Name

You may set the Internet address of the AXIS PrintPoint 140 BJC in four different ways, using either ARP, RARP, BOOTP, or DHCP. The main characteristics of each of these methods are described below:

- ARP - available in UNIX, Windows 95 and Windows NT. This is generally considered to be the easiest method although it does require the Internet address for each new device to be downloaded individually. It is not appropriate to use this method over routers.
- RARP - available in UNIX, it downloads the Internet address to each device automatically. It requires a RARP daemon on your system, and operates within a single network segment only.
- BOOTP - available in UNIX and quite similar to RARP, although it can operate on the entire network. Requires a BOOTP daemon on your system. A request made to an active BOOTP or RARP daemon initiates a search of the Ethernet Address Table (RARP daemon), or Boot Table (BOOTP daemon) for an entry matching the print server's Ethernet address. If a matching entry is found, the daemon then downloads the Internet address to the print server.
- DHCP - available in Windows NT and UNIX systems, it allows for the automatic but temporary assignment of Internet addresses from a central pool. DHCP will, when enabled, cause the selected host to automatically allocate and download a free Internet Address, Default Router Address and Net Mask to the requesting print server. It also provides validation data that defines how long the Internet address will remain valid.

The procedure for using each of the above methods are described in detail below.

- Notes:** ☐ Although the AXIS PrintPoint 140 BJC does not support printing in UNIX environments, the Internet address may be set with the described UNIX methods. This is useful for Network Administrator using UNIX operating systems.



- ❑ Please note that although it is recommended practice to refer to the host name when accessing your AXIS PrintPoint 140 BJC, it is perfectly acceptable to replace this name with the Internet address in all instances. Indeed, this becomes a necessity when:
- the host name has not been included in your system host table
 - attempting to use the ARP command in a Windows 95 or NT environment.

The latter point is demonstrated in the first of the examples below.

Using ARP in Windows 95, Windows NT



Windows

In both Windows 95 and Windows NT, the Internet address can be set using the ARP method. Perform the following commands to download the Internet address and verify correct Internet communication.

Start a DOS window. Type the following commands:

```
arp -s <Internet address> <Ethernet address>
ping <Internet address>
arp -d <Internet address>
```

Example:

```
arp -s 192.168.3.191 00-40-8c-10-00-86
ping 192.168.3.191
arp -d 192.168.3.191
```

The host will return Reply from 192.168.3.191... or some similar message. This indicates that the address has been set and the communication is established.

- Notes:** ❑ When using the Windows 95 implementation of ARP you must first, if you have an empty ARP table (seen with arp -a), ping an existing unit on your network before setting the Internet address of your AXIS PrintPoint 140 BJC.



- ❑ Please note that when you execute the ping command for the first time, you will experience a significantly longer response time than is usual.
- ❑ The `arp -d` command is advised so that the Internet to Ethernet address information is stored as a dynamic parameter within the host's cache memory. Failure to execute this command will mean that the mapping is static and consequently installed permanently on the host.

Using ARP in UNIX You may also use the ARP method for downloading the Internet address within a UNIX environment.

Type the following commands:

```
arp -s <host name> <Ethernet address> temp  
ping <host name>
```

Example

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

The host will return `npsname is alive`, or some similar message. This indicates that the address has been set and the communication is established.

- Notes:**
- ❑ The ARP command can vary between different UNIX systems. Some BSD type systems expect the host name and the node address in reverse order. Furthermore, IBM AIX systems will require the additional argument `ether`. For example:

```
arp -s ether npsname 00:40:8c:10:00:86 temp
```

- ❑ Please note that when you execute the ping command for the first time, you may experience a significantly longer response time than is usual.



Using RARP in UNIX Follow the step-by-step procedure below to use the RARP method:

1. Append the following line to your Ethernet Address table. This is typically performed using the command `/etc/ethers`:

```
<Ethernet address> <host name>
```

Example

```
00:40:8c:10:00:86 npsname
```

2. Update your host table and alias name databases, as described previously.
3. If it is not already running, start the RARP daemon. This is typically performed using the command `rarpd -a`
4. Restart the AXIS PrintPoint 140 BJC to download the Internet address.

Using BOOTP in UNIX Follow the step-by-step procedure below to use the BOOTP method:

1. Append the following entry to your boot table. This is typically performed by editing the file: `/etc/bootptab`

```
<host name>:ht=<hardware type>:vm=<vendor magic>:\  
:ha=<hardware address>:ip=<Internet address>:\  
:sm=<subnet mask>:gw=<gateway field>
```

Example:

```
npsname:ht=ether:vm=rfc1048:\  
:ha=00408c100086:ip=192.168.3.191:\  
:sm=255.255.255.0:gw=192.168.1.1
```

2. Update your host table and alias name databases as described previously.
3. If it is not already running, start the BOOTP daemon. This is typically performed using the command `bootpd`



- Restart the AXIS PrintPoint 140 BJC to download the Internet address, default router address and netmask.

- Notes:**
- ☐ The `ht` and `vm` fields must be entered exactly as in the example.
 - ☐ The `na` field is the Ethernet address and the `ip` field is the Internet address of your AXIS PrintPoint 140 BJC.
 - ☐ The `gw` and `sm` fields correspond to the default router address and netmask (`DEF_ROUT` and `NET_MASK`).

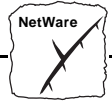
Using DHCP in Windows



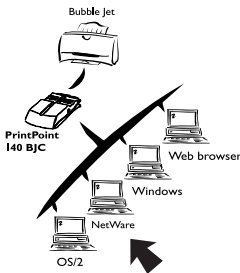
Windows

Follow the step-by-step procedure below to use the DHCP method:

- Edit or create a scope in the DHCP manager of the DHCP daemon. The entries included into this scope should include the following:
 - range of IP addresses
 - subnet mask
 - lease duration
 - default router IP address
- Activate the scope.
- Enable DHCP in the configuration file of the AXIS PrintPoint 140 BJC using AXIS NetPilot™ or any other preferred method.



Section 3 Setting Up - NetWare



If you have not already done so, you should use the Installation Wizard in AXIS NetPilot™ to install your network print server; refer to *Section 2 - Basic Installation*.

After performing the basic installation, the AXIS PrintPoint 140 BJC is ready for printing within the NetWare environment. This section provides information for making further adjustments to the configuration.

If you intend to operate your AXIS PrintPoint 140 BJC in a multiprotocol environment, you should also proceed to the other relevant sections in this manual, namely:



- Section 4 Setting Up - Windows
- Section 5 Setting Up - OS/2
- Section 6 Web Based Management

Set Up using AXIS NetPilot™



You may use the AXIS NetPilot™ to:

- set up the print queues, printers, and print servers.
- set up the configuration parameters of the AXIS PrintPoint 140 BJC.
- monitor the printers on the network.

- Notes:**
- ☐ AXIS NetPilot™ contains an extensive on-line help facility to assist you with any of the operations listed above.
 - ☐ The AXIS NetPilot™ software is designed to set up a range of different network environments. Therefore you will encounter windows that are relevant to other systems as well as NetWare.



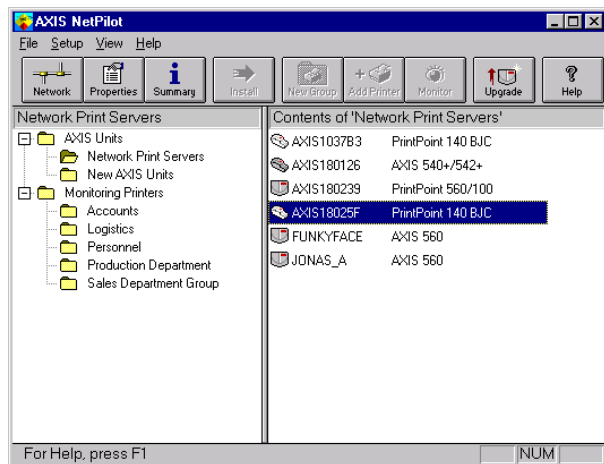
Caution

Any network configuration should involve the Network Administrator.

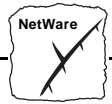
Using AXIS NetPilot™ to Manage your Print Servers

By opening folders from within the left hand pane of the AXIS NetPilot™ main window you can:

- from 'Network Print Servers' select any installed Axis network print server that you wish to configure, or
- from 'New Axis Units' select any Axis network print server that you wish to install using the Installation Wizard, or
- from 'Monitoring Printers' select any group of printers that you wish to monitor.



The main window of AXIS NetPilot™



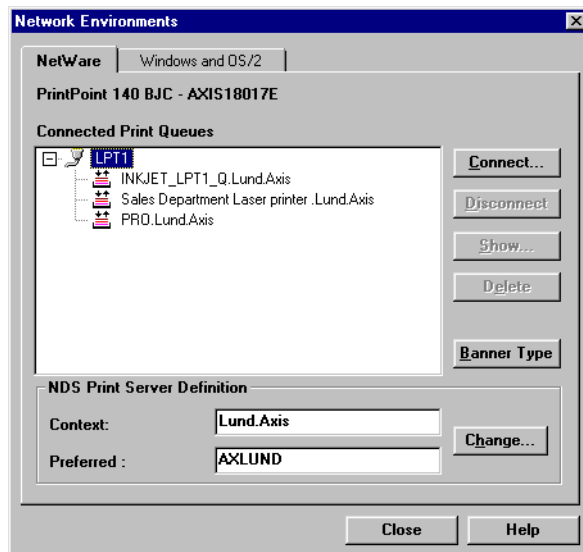
Managing Printers and Print Queues

Having installed your AXIS PrintPoint 140 BJC print server in accordance with the basic installation procedures described in *Section 2 - Basic Installation*, your AXIS PrintPoint 140 BJC should now feature in the Contents of 'Network Print Servers' pane of the AXIS NetPilot™ Main window.

Examine Queues and Servers

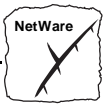
The NetWare Network Environments window detailed below, allows you to examine all Print Queues and NetWare Print Servers connected to the AXIS PrintPoint 140 BJC.

To gain access to this window, simply select the required Network Print Server from AXIS NetPilot™ Main window, and then choose Network from the Setup menu. Alternatively, you may click on the Network Icon on the Toolbar. A dialog box will then ask you to log on to your NetWare file server, if you have not already done so.



The AXIS NetPilot™ NetWare Network Environment window

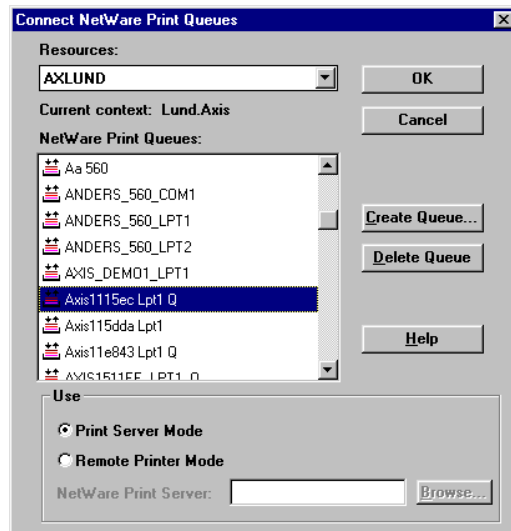
The AXIS PrintPoint 140 BJC periodically updates the configuration by searching the NDS tree or, in the case of NetWare versions 3.x, the file servers.



Print Queue Connection

To connect a print queue to a print server port, select the print server port you wish to connect from the NetWare Network Environments window. Click Connect...

The Connect NetWare Print Queues window detailed below, will then be displayed.

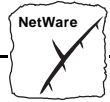


The AXIS NetPilot™ Connect NetWare Print Queues window

Select the location of the print queue from the Resources box. Click either on an existing NetWare print queue for connection to the server port, or alternatively create a new print queue by clicking on Create Queue...

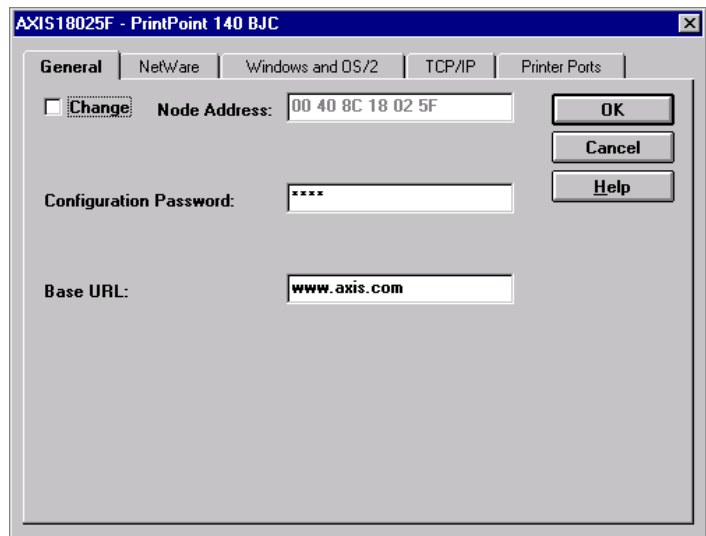
To define the method of printing to be used, select either Print Server Mode or Remote Printer Mode. If you use Remote Printer Mode you must enter the NetWare Print Server name, or make an appropriate selection that will work with the AXIS PrintPoint 140 BJC print server, using the Browse... button.

Finally, click the OK button to return to the Network Environments window.



Configuring via the Property Pages

Select the required Network Print Server and then Properties from the Setup menu in the AXIS NetPilot™ Main window, or alternatively click the Properties Icon on the Toolbar. A comprehensive set of *Property Pages* are then presented with an appropriate array of selection tabs.



A Property Page showing general parameters to be set

AXIS PrintPoint 140 BJC Modes

The AXIS PrintPoint 140 BJC can run in either Print Server Mode or Remote Printer Mode. The following overview explains the advantages and limitations of each mode.

Property Pages: This is the AXIS NetPilot™ way of allowing you to inspect and change any of the AXIS PrintPoint 140 BJC parameters. There are different Property Pages for each of your network environments. Simply click the NetWare tab to gain access to the NetWare configuration.



Print Server Mode

In the Print Server mode the AXIS PrintPoint 140 BJC logs in to a file server(s) and repeatedly polls the print queues for print jobs. In this fashion, the AXIS PrintPoint 140 BJC emulates a NetWare print server, that is a workstation running PSERVER. It provides high printing speed with low network load and is the recommended mode for medium to large sized networks. Each print server in PSERVER mode will occupy one NetWare license.

Advantages

- Easy to set up.
- High performance (typically 150-400 kbytes/s).

Limitations

- Requires a NetWare user licence for each AXIS PrintPoint 140 BJC to file server link.

Remote Printer Mode

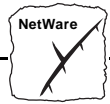
In the Remote Printer mode the AXIS PrintPoint 140 BJC connects itself to a PSERVER NetWare program running on the file server, or alternatively to a dedicated workstation running PSERVER.EXE. It then automatically receives print jobs from the file server. In this fashion, the AXIS PrintPoint 140 BJC emulates a workstation running the NetWare remote printer software RPRINTER, or NPRINTER. This mode is only recommended for small networks where the number of NetWare user licences is a major issue.

Advantages

- NetWare user licences are not required.
- Easy to set up.

Limitations

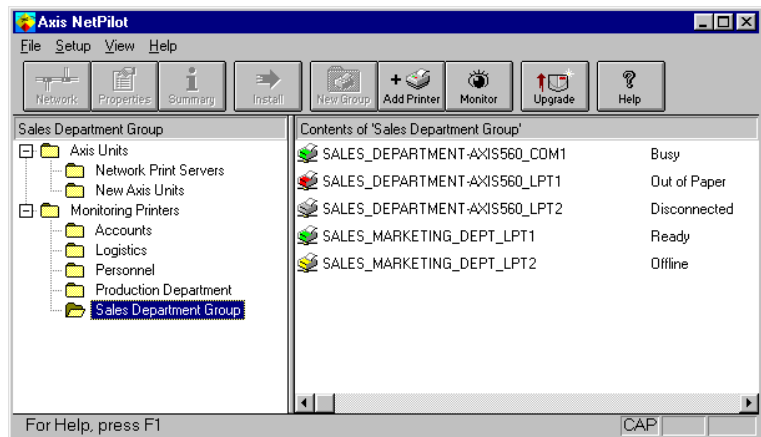
- Lower performance, e.g. typically 20 - 70 kbytes/s for NLM.
- Higher network load.



Monitoring the Printers

For the purpose of printer monitoring, the AXIS NetPilot™ allows users to create groups of printers. The printers comprising each group may then be displayed in the AXIS NetPilot™ window. To examine the status of any printer within a group, simply click on the appropriate group folder icon. The status of each printer within a group is displayed and also denoted by a relatively colored icon.

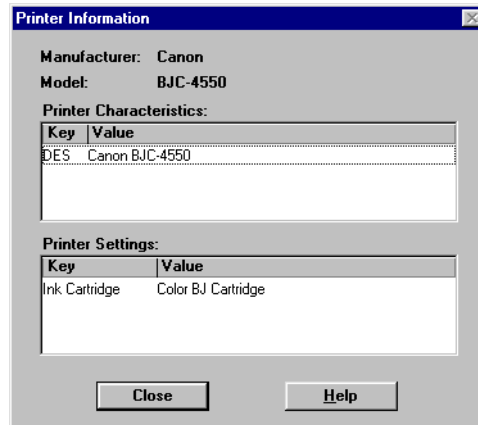
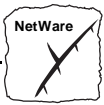
Any number of printer groups can be created and unwanted groups can be deleted. Similarly, individual printers can be included or deleted from any group. A printer may also be included in more than one group, if required.



Monitoring Window of the AXIS NetPilot™

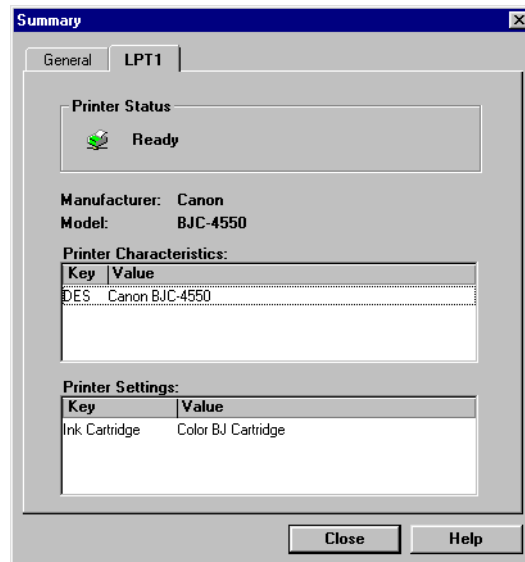
Printer Information

It is possible to obtain extended information about the Bubble Jet printers that appear in the monitoring window of the AXIS NetPilot™. To open the Printer Information window, just click the desired printer and choose Printer Information from the File menu.

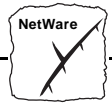


AXIS NetPilot™ Printer Information window

The printer information is also displayed in the Summary window of every AXIS PrintPoint 140 BJC connected to a Bubble Jet printer.



AXIS NetPilot™ Summary window



Other NetWare Configuration Methods

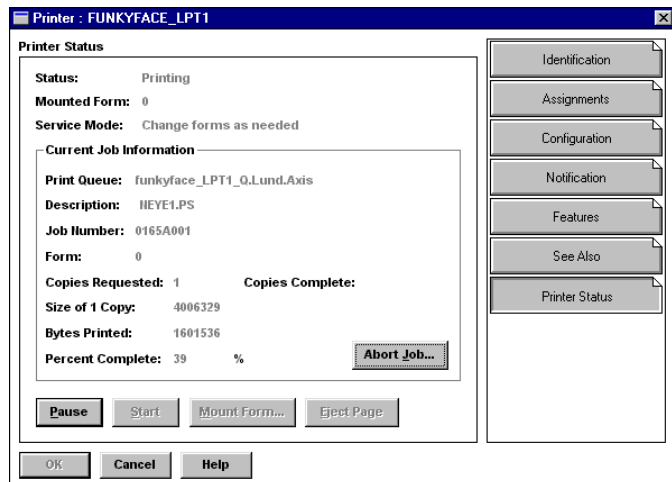
Novell Utilities

After installing the AXIS PrintPoint 140 BJC into the NetWare environment using the AXIS NetPilot™, adjustments to the configuration can be made at any time, using the AXIS NetPilot™. Alternatively, you may wish to manage the AXIS PrintPoint 140 BJC using either Novell's NetWare Administrator, or PCONSOLE.

Some useful features provided by the NetWare Administrator are described in more detail below:

Printer Status

The NetWare dialog Printer Status menu, shows the status of an active print job serviced by an AXIS PrintPoint 140 BJC network print server. Detailed information concerning the active job is displayed including Print Queue, print job description, size of print file, percentage of job completed, etc. The administrator also has the ability to abort or pause the print job from this menu.

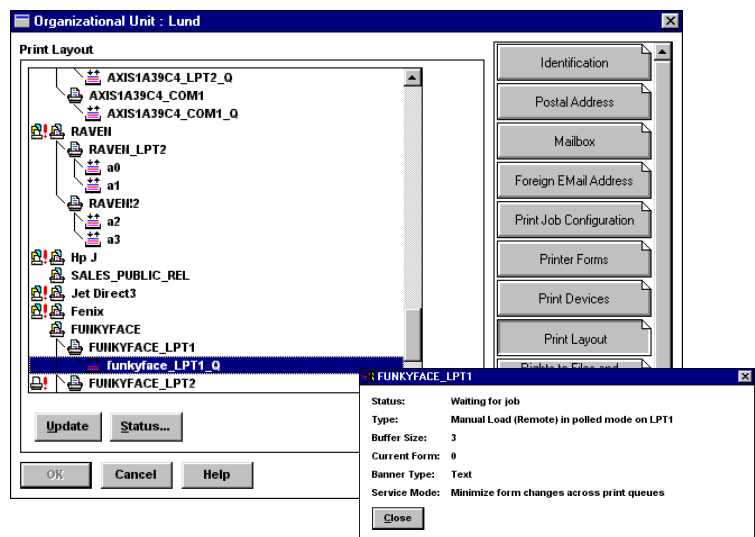


NetWare Administrator Printer Status Menu

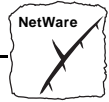


Notification Using the NetWare Administrator, you may also enable or disable status notification messages for printers connected to the AXIS PrintPoint 140 BJC, i.e. Busy, Offline, Out of paper, Paper jam...etc. Print job owners and chosen administrators may be added or removed from the list of persons to be notified.

Print Layout A print layout of installed AXIS PrintPoint 140 BJC Network Print Servers and their relative print queues may be viewed for any NetWare Organizational Unit. Summary information is also displayed simply by right-clicking on the printer object you wish to examine.

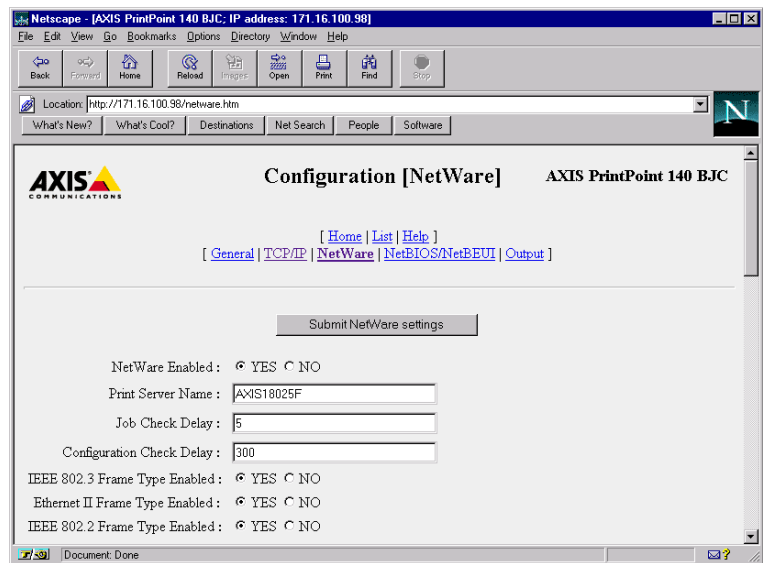


NetWare Print Layout with corresponding summary information



Web Browser

If your network supports TCP/IP, in addition to NetWare, you may configure the AXIS PrintPoint 140 BJC for operation within the NetWare environment, using any standard Web browser. From the AXIS PrintPoint 140 BJC NetWare Configuration Page you can change any NetWare parameter. You can also monitor the status of your print jobs, download software updates and access useful information. Refer to *Section 6 - Web Based Management* for further information.



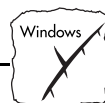
The AXIS PrintPoint 140 BJC NetWare Configuration Page

FTP

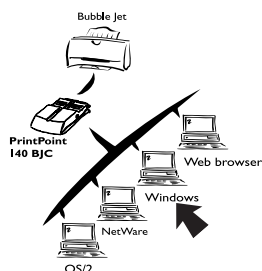
FTP provides another method for configuring the AXIS PrintPoint 140 BJC. For further information refer to *Editing using FTP*, on page 70.



Section 3: Setting Up - NetWare



Section 4 Setting Up - Windows



Having connected the AXIS PrintPoint 140 BJC to your network, this section now describes how to use the AXIS Print Utilities for printing in the Windows environment.

The following Windows platforms are supported:

- Windows 3.1 (requires add-on network support, see page 45)
- Windows for Workgroups
- Windows 95
- Windows NT
- Windows clients using LANtastic.

If you intend to use the AXIS PrintPoint 140 BJC in a multiprotocol environment, you should also proceed to other relevant sections in this manual, namely:

- Section 3 Setting Up - NetWare
- Section 5 Setting Up - OS/2
- Section 6 Web Based Management

Using the AXIS Print Monitor for Windows 95 and NT



Supplied on the AXIS Utilities diskette, the AXIS Print Monitor should be used for network printing within Windows 95 and Windows NT environments. It allows AXIS Network Print Servers to be connected in the same simple fashion as a local printer port and once installed, is automatically initialized upon system startup.

Install this software now if you have not already done so - see the instructions on the AXIS Utilities diskette label.



Should you wish to change the default name or amend any of the AXIS PrintPoint 140 BJC default parameters, you may do so using the AXIS NetPilot™, or any standard Web browser. Refer to *section 6 - Web based Management*.



About AXIS Print Monitor

AXIS Print Monitor is a Windows component that has been developed for peer-to-peer printing under Windows 95 and Windows NT that allows your print jobs to be sent directly to the print server.

Peer-to-Peer Printing

The AXIS Print Monitor needs to be installed on each workstation performing peer-to-peer printing. Once installed, the AXIS Print Monitor then allows users to access to all network printers, just as if they were connected directly to their workstation. Peer-to-peer printing affords the following benefits:

- You can monitor the printer status and enable Pop-up messages that notify you when the printer is off-line, out of paper, or not responding.
- You do not have to rely on a server.

Client-Server Printing

Pop-up messages should not be enabled on the server as the status of shared printers will not be reported to the client platforms. Pop-up messages are only issued on the server and must be acknowledged before a print job can be released.

User Dialog

Although the AXIS Print Monitor user dialog will vary depending on which platform you are using, i.e. Windows 95 or Windows NT, the functionality of these variants is exactly the same. Follow the appropriate procedures below to install Axis printer ports.

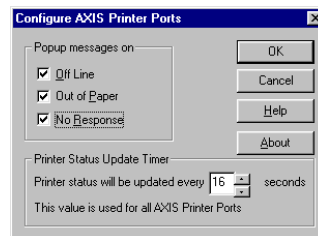
- Notes:**
- ☐ Microsoft Network (NetBIOS/NetBEUI) must be running when using AXIS Print monitor.
 - ☐ The AXIS Print Monitor may be used for DOS printing when installed on Windows NT platforms. However, in Windows 95 this is only possible from a client workstation, in a client-server configuration. The AXIS Print Utility for Windows should be used if DOS peer-to-peer printing is necessary from a Windows 95 platform.



Using the AXIS Print Monitor with Windows 95

Follow the procedure below to install Axis printer ports from a Windows 95 workstation:

1. To start the Add Printer Wizard, select Settings - Printers from the Start menu and double-click the Add Printer icon.
2. After clicking Next> in the first dialog, the Wizard asks you to select between Local Printer and Network Printer. Select Local Printer. Click Next>.
3. Choose the appropriate print driver for your printer. If the desired print driver already appears within the displayed manufacturer and model lists dialog, click Next> and proceed directly to step 6.
4. Click the Have Disk... button. Insert the printer driver diskette into the floppy disk drive of your computer. If the floppy disk drive is A:/ then click OK, otherwise type the letter of your disk drive and then click OK.
5. Select the desired printer you want to install from the diskette and click Next>.
6. Select the AXIS printer port from the Available Ports list. The port name appears as <name>.LP1, where <name> is AX followed by the last six digits of the AXIS PrintPoint 140 BJC serial number, e.g. AX560B35. Click the Configure Port button.



The Configure AXIS Printer Ports dialog



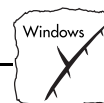
7. Choose when Status Pop-up messages are to be displayed from the Configure AXIS Printer Ports dialog. A help facility is available should you require any additional information. Check the appropriate boxes and then click Next>.
8. Enter an appropriate name for your printer and click Next>.
9. Choose whether you wish to produce a Test Page and then click Finish.

Note: ☐ Even if the desired print driver is available from the manufacturer and model lists, use the driver on the diskette that comes along with the printer. This assures you of the latest driver software.

Using the AXIS Print Monitor with Windows NT

Follow the procedure below to install Axis Printer Ports from a Windows NT workstation:

1. To start the Add Printer Wizard, select Settings - Printers from the Start menu and double-click on the Add Printer icon.
2. The Wizard asks you to select between My Computer and Network Printer Server. Select My Computer.
3. Before an AXIS Port can be used, it must be added. When the Available ports dialog is active, click Add Port..., select AXIS Port and then click New Port...
4. Select the AXIS printer port you wish to add and then click OK. The port appears as <name>.LP1, where <name> is AX followed by the last six digits of the AXIS PrintPoint 140 BJC serial number, e.g. AX560B35. Click OK.
5. Close the Printer Ports window.
6. Click the Configure Port... button and choose when Pop-up messages are to be displayed. It is possible to configure AXIS Ports to issue Pop-up messages when the printer is Off-line, Out of paper or Not responding. Check the appropriate boxes and then click OK. Continue the installation by clicking Next>.



7. Choose the appropriate print driver for your printer. If the desired print driver already appears within the displayed manufacturer and model lists dialog, click Next> and proceed directly to step 10.
8. Click the Have Disk... button. Insert the print driver diskette into the floppy disk drive of your computer. If the floppy disk drive is A:/ then click OK, otherwise type the letter of your disk drive and then click OK.
9. Select the desired printer you want to install from the diskette and click Next>.
10. Enter an appropriate name for your printer and click Next>.
11. Choose whether you wish to share the printer with other network users and click Next>.
12. Choose whether you wish to produce a Test Page and then click Finish. The Axis Printer Port is now installed.

Note: ☐ Even if the desired printer is available from the manufacturer and model lists, use the driver on the diskette that comes along with the printer. This assures you of the latest driver software.



Using the AXIS Print Utility for Windows



The AXIS Print Utility for Windows is supplied on the AXIS Utilities diskette and is the tool for network printing within Windows for Workgroups and Windows 3.1 environments.

You should install this utility now if you have not already done so - see the instructions on the AXIS Utilities diskette label.

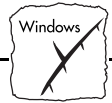
About AXIS Print Utility for Windows

AXIS Print Utility for Windows is a dual purpose application for network printing in the Windows environment. It has two fundamental purposes:

- Install and maintain AXIS PrintPoint 140 BJC printer ports as Windows printer ports.
- Capture and monitor print jobs directed to the AXIS PrintPoint 140 BJC port. Print jobs are directed through a spool directory either at your local hard disk (peer-to-peer mode), or at the file server (client-server mode). The printer port status of your AXIS PrintPoint 140 BJC may be monitored and Pop-up notification messages can be generated, keeping you informed of completed print jobs or any problematic condition.

For more information about AXIS Print Utility for Windows, see the on-line help.

- Notes:**
- ☐ Microsoft Network (NetBIOS/NetBEUI) must be running when using AXIS Print Utility for Windows.
 - ☐ AXIS Print Utility for Windows must be running when printing in peer-to-peer mode.
 - ☐ The AXIS Print Utility for Windows is not needed on the client platforms for client-server printing.
 - ☐ If you wish, you may change the default name of your AXIS PrintPoint 140 BJC or amend any of the default parameters, using the AXIS NetPilot™, or any standard Web browser. Refer to *Section 6 - Web Based Management*.



Peer-to-Peer vs. Client-Server Printing

Windows for Workgroups and Windows 3.1 users requiring access to a network printer in peer-to-peer mode will need to install the AXIS Print Utility for Windows software onto their workstation. Users may then add the required network printer to their systems and use the printer as if it was connected directly to their workstation. Peer-to-peer printing affords the following benefits:

- You can monitor the printer status at all times and be notified when a print job is complete.
- You do not have to rely on a server.

Client-server operation requires only one user to install the AXIS Print Utility for Windows software onto their workstation. This user then adds the printer to his or her workstation (the server) and shares the printer with other users on the network. The other users (the clients) may connect to the printer through the server via the Windows Print Manager.

Client-server mode provides a way of maintaining queue ordering and job priority, but at a price. This is because:

- You cannot receive printer status or print job notification.
- The workstation set up as the server must be available at all times. It must also have the capacity to handle the print jobs that pass through it.

- Notes:**
- ☐ When using client-server mode, other users may still install the AXIS Print Utility for Windows software, for printing directly to the network printer in peer-to-peer mode.
 - ☐ When using the client-server mode, it is recommended that the server is setup only on a Windows for Workgroups workstation.

Windows 3.1

In order to print to a network printer, Windows 3.1 requires the installation of network support, such as the LAN Server or LAN Manager Workstation software. When installed, proceed as described under Windows for Workgroups below.



Windows for Workgroups

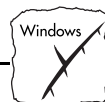
Peer-to-Peer Printing

Follow these steps to install your AXIS PrintPoint 140 BJC for peer-to-peer printing at a Windows for Workgroups workstation:

1. Double-click the AXIS Print Utility icon.
2. In the Port menu, click Add.
3. In the NPS Port list, select the AXIS PrintPoint 140 BJC port to be installed. The port will appear as <name>.LP1, where <name> is AX followed by last six digits of your print server number e.g. AX100086.LP1. However, this alphanumeric name will be superseded by any new name given to your AXIS PrintPoint 140 BJC when using AXIS NetPilot™.
4. Accept or change the suggested Windows port name and type any required comment in the Description field. Make a note of the Windows port name as you will need this later, then click OK to install the Windows port.
5. In the Port menu, click Connect... to bring up the Windows Printers dialog.
6. Select a printer driver from the list of Installed Printers (or click Add>> to install a new driver), then click Connect...
7. Select the Windows port name from step 4 above (this name can be found at the bottom of the Ports list).
8. Click OK to close the Connect dialog, and Close to close Printers.

The setup is completed and you can now print through your AXIS PrintPoint 140 BJC.

Note: ☐ The AXIS Print Utility for Windows must be running when you print through your AXIS PrintPoint 140 BJC. We strongly recommend that you copy the AXIS Print Utility icon into your StartUp folder.

**Client-Server Printing:
Server Setup**

Follow these steps to install your AXIS PrintPoint 140 BJC for client-server printing at a Windows for Workgroups server:

1. Choose a workstation that you want to use as server for network printing. The server must be available at all times and must have sufficient hard disk space for spooling print jobs.
2. Make sure that the printer sharing option is enabled. (Open Network Setup, click Sharing..., check the 'I want to be able to allow others to print to my printer(s)' box).
3. Install AXIS Print Utility for Windows on the server.
4. Set up your AXIS PrintPoint 140 BJC as described under *Peer-to-Peer Printing*, on page 48.
5. Open Print Manager and select your printer.
6. In the Printer menu, select Share Printer As...
7. Type a printer name in the Share As field (this is the printer name seen by the clients, see Client Setup below).
Check the Re-share at Startup box, then click OK.

The server setup is now completed. Set up the clients as described below.

- Note:** ☐ The AXIS Print Utility for Windows must be running when you print through your AXIS PrintPoint 140 BJC. We strongly recommend that you copy the AXIS Print Utility icon into your StartUp folder.



**Client-Server Printing:
Client Setup** Follow these steps to use your AXIS PrintPoint 140 BJC for client-server printing at a Windows for Workgroups client:

1. In the Control Panel, select Printers.
2. Select a printer driver from the list of Installed Printers, or click Add>> to install a new driver. Click Connect...
3. Select Network... in the Device Name list, select a local port (LPT1- LPT3) to redirect to your network printer.
4. In the Show Shared Printers on list, select the server from Server Setup above.
5. In the Shared Printers list, select the printer you want to use.
6. Click OK, OK and Close.
7. Exit the Control Panel.

The client setup is completed and you can now print through your AXIS PrintPoint 140 BJC.

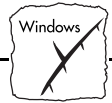
Windows Clients using LANtastic

From any Windows client, the AXIS PrintPoint 140 BJC may also be used for networks printing within LANtastic environments.

LANtastic users may use the AXIS Print Utilities in exactly the same manner as described in the proceeding Windows sections, using a choice of Axis utility software that is guided by the type of Windows client employed:

- Refer to *Using the AXIS Print Utility for Windows* if you are using a Windows for Workgroup client.
- Refer to *Using the AXIS Print Monitor for Windows 95 and NT* if you are using either a Windows 95 or Windows NT client.

Note: ☐ AXIS Print Monitor and AXIS Print Utility for Windows uses NetBIOS/NetBEUI for printing, so make sure that your LANtastic client is running this protocol.



Windows NT - LPD Printing

Windows NT Server version 4.0

This section describes how to set up a Windows NT Server v4.0 for LPR printing over the TCP/IP protocol.

Basic Setup

If you have not already done so, you should perform the TCP/IP basic setup procedures prior to installing a printer for LPD printing. These procedures are defined in *Basic Set Up for TCP/IP*, on page 22.

Preparing for LPR/LPD printing

In the Control Panel, click the Network icon. If the TCP/IP Printing entry appears, then TCP/IP is already installed. Close the Network folder and skip to *Installing a printer* below.

Follow these steps to prepare for LPR/LPD printing:

1. Open the Control Panel and click the Network icon.
2. Select Protocols.
3. Add TCP\IP Protocol.
4. Select Services.
5. Add MS TCP\IP Printing.

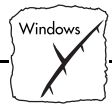


Installing a printer Proceed as follows to install a printer for LPD printing:

1. Open the Control Panel and open the Printers folder.
2. Click Add Printer, select My Computer and then go to Next.
3. Select Add Port. In Printer Ports, choose LPR Port and click New Port.
4. In Add LPR compatible printer, enter the name or IP-address of the AXIS PrintPoint 140 BJC as the print server to provide LPD.
5. Enter 'LPT1' as the name of printer or print queue on that server.
6. Choose a suitable printer driver for your printer and go to Next.
7. Enter a printer name and go to Next.
8. Select Shared if you wish to share the printer over the network.
9. Enter a share name.
10. Click Next and then Finish.

Shared printer from a Windows 95 client Follow the step-by-step instructions if you are using a shared printer from a Windows 95 client:

1. Open the Control Panel.
2. Open the Printers folder.
3. Click Add Printer.
4. Select Network Print Server and then go to Next.
5. Enter the path for the network printer or browse the network to find and select it.
6. Go to Next and then Finish.



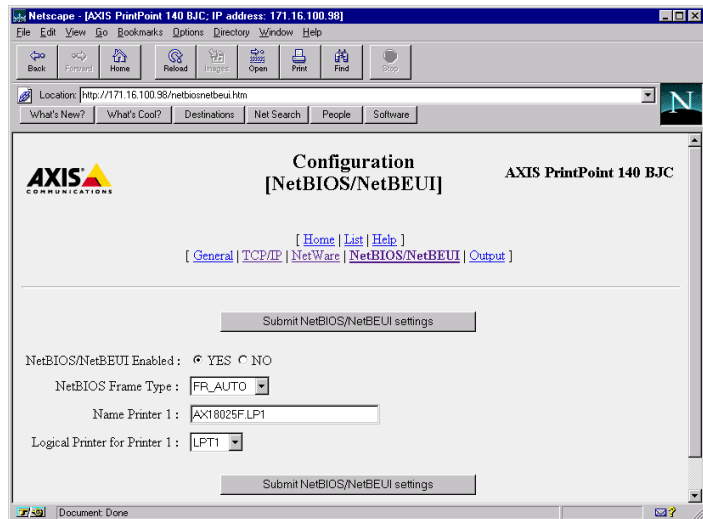
Other Windows Configuration Methods

AXIS NetPilot

After installing your printers using either AXIS Print Monitor or AXIS Print Utility for Windows, adjustments to the AXIS PrintPoint 140 BJC configuration can be made at any time using the AXIS NetPilot™.

Web Browser

If your network supports TCP/IP, you may alternatively configure the AXIS PrintPoint 140 BJC for operation within the Windows environment, using any standard Web browser. Any Windows parameter in the AXIS PrintPoint 140 BJC Configuration file may be amended from within the NetBIOS/NetBEUI Configuration Page. You may also monitor the status of your print jobs, download software updates and access useful information. Refer to *Section 6 - Web Based Management* for further information.



The AXIS PrintPoint 140 BJC NetBIOS/NetBEUI Configuration Page

FTP

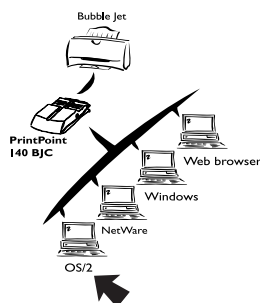
FTP provides another method for configuring the AXIS PrintPoint 140 BJC. For further information refer to *Editing using FTP* on page 69.



Section 4: Setting Up - Windows



Section 5 Setting Up - OS/2



Having connected the AXIS PrintPoint 140 BJC to your network, this section now describes how to set up your AXIS PrintPoint 140 BJC for printing in the OS/2 environment.

If you intend to operate your AXIS PrintPoint 140 BJC in a multiprotocol environment, you should also proceed to the other relevant sections in this manual, namely:

Section 3 Setting Up - NetWare

Section 4 Setting Up - Windows

Section 6 Web Based Management

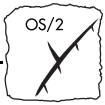
Installation Using AXIS Print Utility for OS/2



The installation and setup operations are performed with the AXIS Print Utility for OS/2. You should install this utility now if you have not already done so - see the instructions on the OS/2 Utilities diskette label.

Should you require to change the default name of your AXIS PrintPoint 140 BJC or amend any of default parameters use the AXIS NetPilot™ from any Windows platform that is connected to your network, or WinOS/2 window under OS/2.

The AXIS Print Utility for OS/2 is not needed on the client platforms when using a client-server configuration.



About AXIS Print Utility for OS/2

AXIS Print Utility for OS/2 is a dual purpose application for network printing in the OS/2 environment. Its fundamental purpose is to:

1. Install and maintain the AXIS PrintPoint 140 BJC printer port as an OS/2 printer port.
2. Capture and monitor print jobs directed to the AXIS PrintPoint 140 BJC port. Print jobs may be directed through a spool directory either at your local hard disk, or at the file server. The printer port status of your AXIS PrintPoint 140 BJC may be monitored and pop-up notification messages can be generated, keeping you informed of completed print jobs or any problematic condition.

Note: ☐ The NetBEUI protocol must be active. If not, use MPTS/LAPS (LAN Server) to activate it.

Install the AXIS PrintPoint 140 BJC

1. When AXIS Print Utility for OS/2 is running, click Install to install your AXIS PrintPoint 140 BJC. It will then appear in the list as <name>.LP1, where <name> is AX followed by last six digits of your print server number. e.g. AX100086.LP1. However, this alphanumeric name will be superseded by any new name given to your AXIS PrintPoint 140 BJC when using AXIS NetPilot™.
2. Select the port that you wish to install, then click Install.

Repeat this procedure for each server using the AXIS PrintPoint 140 BJC.

Note: ☐ The AXIS Print Utility for OS/2 must be running in order to print using your AXIS PrintPoint 140 BJC.



Integrating your **AXIS PrintPoint I40 BJC** into the **OS/2 Environment**

Create a Print Queue (OS/2 version 1.x)

1. Double-click the Print Manager icon, click Setup, then select Printers...
2. Click Add to make a new printer definition, then type a name of your choice in the Name field.
3. Select \PIPE\<name>.LP1 from the Device list, then select a printer driver suitable for your printer.
4. Click Add, then click OK to confirm the printer definition.
5. Click Setup, then select Queues...
6. Click Add to create a print queue, and type a name in the Name field.
7. Click Add, then click OK to confirm the queue definition.

Note: ☐ OS/2 printer drivers for Bubble Jet printers are only available from IBM.

Create a Print Queue (OS/2 version 2.x and OS/2 Warp)

1. Double-click the Templates folder, then drag the Printer icon out to the Workplace Shell (or into a folder) while pressing the right mouse button.
2. Type a name of your choice in the Name field.
3. Select \PIPE\<name>.LP1 from the Port list, and select a printer driver suitable for your printer from the Standard Printer list.
4. Click OK to confirm the printer definition.

Note: ☐ OS/2 printer drivers for Bubble Jet printers are only available from IBM.



Share the Print Queue

A print queue must be made a shared resource before it can be accessed from other computers (clients or other servers).

Open an OS/2 window and issue the following command:

```
NET SHARE <queue_name> /PRINT
```

where <queue_name> is the name of the queue created above.

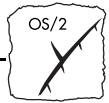
To share a printer resource when using OS/2 Warp with IBM Peer service, follow the steps below:

1. Click the right mouse button on the printer object.
2. Select Share and then Start sharing. In the dialogue box, enter a Description.
3. Select the check-box Start sharing at LAN workstation startup.
4. Click OK.

To share a printer resource when using LAN server 4.0, follow the steps below:

1. Open LAN Server Administration.
2. Open your domain and then Resource Definition.
3. Drag and drop a printer from the template.
4. Enter the Alias name, select a Server name and the previously created Spooler Queue Name.
5. Click OK.

The setup is completed and you can now print through your AXIS PrintPoint 140 BJC.



Other OS/2 Configuration Methods

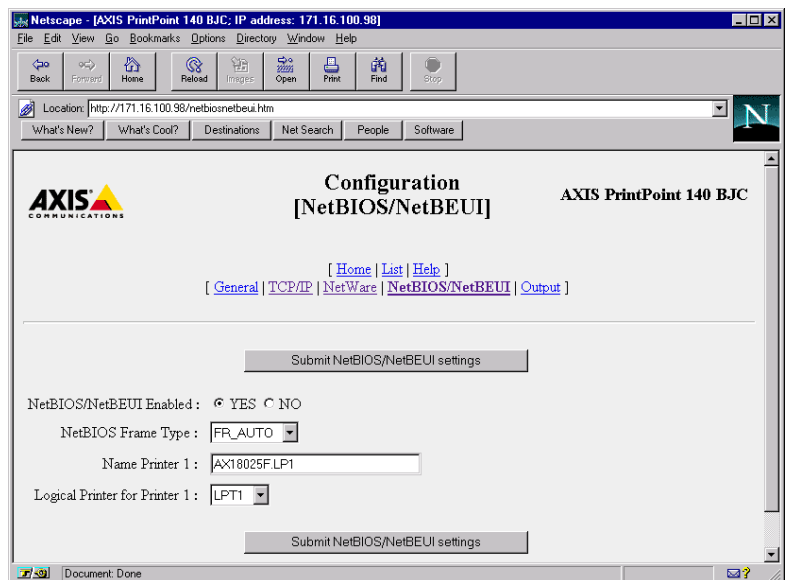
AXIS NetPilot™

After installing your printers using the AXIS Print Utility for OS/2, adjustments to the AXIS PrintPoint 140 BJC configuration can be made at any time using the AXIS NetPilot™.

Note: ☐ The AXIS NetPilot™ runs in a WinOS/2 window.

Web Browser

If your network supports TCP/IP, you may alternatively configure the AXIS PrintPoint 140 BJC for operation within the OS/2 environment, using any appropriate Web browser, e.g. Netscape Navigator for OS/2 Warp. Any OS/2 parameter in the Configuration file may be amended from within the NetBIOS/NetBEUI Configuration Page, using HTTP. You may also monitor the status of your print jobs, download software updates and access useful information. Refer to *Section 6 - Web Based Management* for further information



The AXIS PrintPoint 140 BJC NetBIOS/NetBEUI Configuration Page

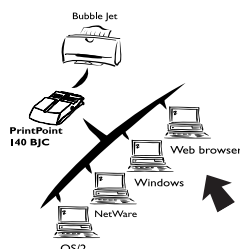


FTP

FTP provides another method for configuring the AXIS PrintPoint 140 BJC. For further information refer to *Editing using FTP*, on page 70.



Section 6 Web Based Management



Having established TCP/IP communication as described in *Section 2 - Basic Installation*, you are now able to access your AXIS PrintPoint 140 BJC from any standard Web browser.

The Web pages within the AXIS PrintPoint 140 BJC provide a quick and easy management tool for performing print server configuration tasks, within the supported networking environments. Whether printing from within a NetWare, Windows, OS/2 or a mixed networking environment, you will find the ease with which you can amend the AXIS PrintPoint 140 BJC configuration parameters using HTTP a considerable benefit.

The information provided within this section will provide an informative and valuable supplement to previous sections of this manual that are relevant to your network. It describes how you may access the Home Page of the AXIS PrintPoint 140 BJC and also explains how the unit may be configured for use within your local networking environment.

After successfully navigating your way around the AXIS PrintPoint 140 BJC Web pages you may proceed to one or more of the following sections, as appropriate to your type of network.



- Section 3 Setting Up - NetWare
- Section 4 Setting Up - Windows
- Section 5 Setting Up - OS/2



Accessing the Web Pages

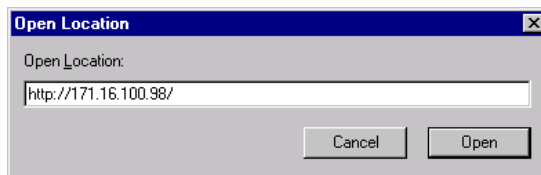
Preparation

To access the AXIS PrintPoint 140 BJC Home Page the Internet Address must be set, as described in *Basic Set Up for TCP/IP*, on page 22.

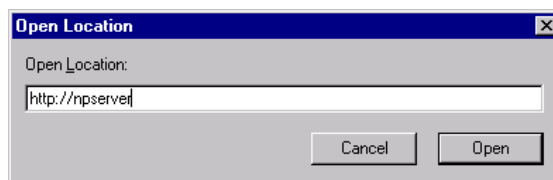
Accessing the Configuration Pages

Follow the steps below to access the Home Page of the AXIS PrintPoint 140 BJC. The browser used in the following example is Netscape Navigator 2.0.

1. Start the Netscape Navigator.
2. From the File menu, select Open Location...
3. Enter the Internet Address of the AXIS PrintPoint 140 BJC as a URL in your browser, as detailed below:

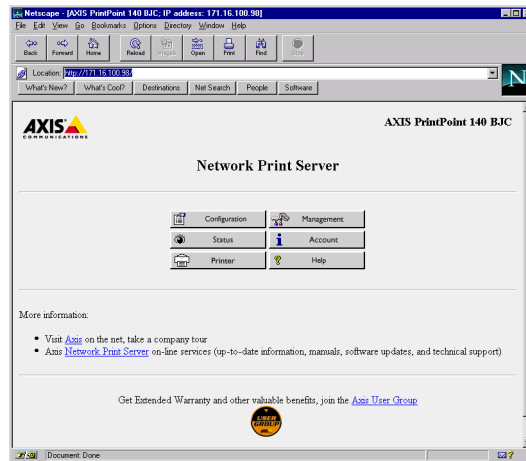


4. If you have assigned a host name, you may refer directly to the host name instead:



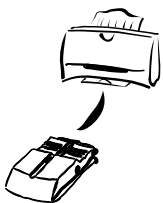


5. The Home Page of your AXIS PrintPoint 140 BJC will now be displayed in your browser.



The AXIS PrintPoint 140 BJC Home Page

HTTP Management Services



Links to the following services are available from the Home Page of the AXIS PrintPoint 140 BJC:

- Configuration
- Management
- Status
- Account
- Printer
- Help



You can also visit Axis on the net, take a company tour and access any of the Axis Network Print Server on-line services; including, manuals, software updates, and technical support. You may also join the Axis User Group for extended warranty and other valuable benefits.

Services Summary



A summary of the services available from the AXIS PrintPoint 140 BJC Home Page follows:

From within the Configuration pages you may:

- Modify configuration parameters of the AXIS PrintPoint 140 BJC. A complete list of these parameters is contained in *Appendix B - The Parameter List*.
- Enable and disable any of the available networking protocols and modify their operation from appropriate Configuration pages.
- Change the node address.
- Amend the root password.

Note: ☐ When clicking on either Management or Configuration for the first time, you will be asked to provide a username and password. By default these are set to `root` and `pass`, respectively.

Caution

Any network configuration should involve the Network Administrator.

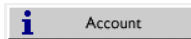
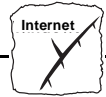


The Management Page allows you to reset the print server and set the parameters to the factory default values. You may also view basic information about your the AXIS PrintPoint 140 BJC, i.e. the current software version, Ethernet address, serial number, base URL address, enabled networking protocols.

User-friendly links to other services are also provided, including Change root password.



You may view the status of the connected printer ports from the Status Page, examine the number of bytes printed, etc.



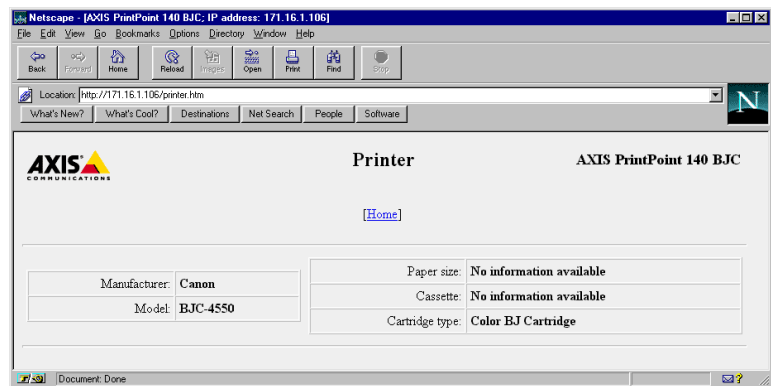
Account

The Account page maintains and displays a historical record of print jobs that also defines the user, logical printer, protocol, file size, elapsed time and off-line time.



Printer

The Printer Page displays brief information about the printer connected to your AXIS PrintPoint 140 BJC. The included printer attributes consist of the printer name, printer model, paper size, cassette and type of cartridge.



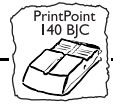
The AXIS PrintPoint 140 BJC Printer Information page



Help

The AXIS NetPilot™ Help utility is primarily designed to assist users with the use of the AXIS NetPilot™. However, the information contained in this help utility is equally relevant to network configuration and management activities that can be performed via the internal Web Pages of the AXIS PrintPoint 140 BJC. An HTTP version of the AXIS NetPilot™ Help facility is therefore made available to assist you to with any of the operations detailed above.





Appendix A The Test Button

The Test button is located on the front right hand side of the AXIS PrintPoint 140 BJC. By depressing this button you are able to:

- Print a test page, to check the connection to the printer.
- Print a parameter list, to define the current settings within your AXIS PrintPoint 140 BJC.
- Reset the AXIS PrintPoint 140 BJC parameters to the original factory default settings.

The functionality of the Test button is determined by the power status of the AXIS PrintPoint 140 BJC and the number of times the button is depressed.

A description of these functions complete with instructions for their implementation, are detailed in the following sections of this appendix.

The Test Page

After connecting your printer to the port of your AXIS PrintPoint 140 BJC, it is recommended that you print out a test page to verify that the cable interface is functioning correctly. The simplest way to do this, is to simply depress the Test button once. The printed test page contains basic information about the AXIS Print Server.

Note: ☐ Depending on the type of printer, an internal printer test page may be printed instead of the print server test page.

The Parameter List

By simply double-clicking on the Test button, the current parameter settings installed in your AXIS PrintPoint 140 BJC print server can be output to the connected printer.

This list provides comprehensive details of all of the parameters and their current status. The parameters may be changed according to your requirements using the AXIS NetPilot™ software.



- Notes:**
- ☐ Some of the parameters require that the AXIS PrintPoint 140 BJC is restarted before becoming effective.
 - ☐ Depending on the type of printer, an internal printer test page may be printed instead of the Parameter list.

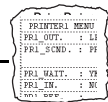
Factory Default Settings

Should you wish to reset the AXIS PrintPoint 140 BJC to the factory default settings, the best way to do this is to use the Test button. Follow the step-by-step procedure below:

1. Remove the power cord to switch off the AXIS PrintPoint 140 BJC.
2. Press and hold down the Test button. Whilst continuing to press the Test button, simultaneously switch on the AXIS PrintPoint 140 BJC by replacing the power cord. Keep the Test button pressed for at least 20 seconds after restoring power until the Network indicator flashes at one second intervals.
3. Release the Test button and wait at least five seconds (five indicator flashes).
4. Press and hold the Test button again for at least five seconds until the Network indicator remains constantly lit.

The AXIS PrintPoint 140 BJC is now reset to factory default settings. Restart the AXIS PrintPoint 140 BJC by switching it off and on.

Note: All parameters return to factory default after reset, except `NODE_ADDR`, `INT_ADDR`, `DEF_ROUT` and `NET_MASK`. These will remain unchanged. Should you wish to change these parameters, you may do so via the General Property page, using the AXIS NetPilot™.



Appendix B The Parameter List

This appendix provides an overview of the AXIS PrintPoint 140 BJC parameters and describes how they may be edited. A sample parameter list is also included. However, please note that because of recent print server software updates, some differences may exist between the parameters installed on your print server and those that are described within this document.

Please refer to the AXIS Network Print Server Technical Reference for a complete description of the parameters. Alternatively, you may wish to access the Axis WWW Home Page at <http://www.axis.com/>, where you can download the latest technical information. For details of the appropriate WWW address in your region, please refer to *Appendix E - How To Contact Axis*.

Editing the Configuration Parameters

Editing using
AXIS NetPilot

All parameter settings are stored in the AXIS PrintPoint 140 BJC *config* file, which may be edited via the Property Pages of the AXIS NetPilot™ software. Each Property Page comprises an array of selection tabs that are appropriate to your operating environments. Each parameter may be defined by using the relevant box. For further information on the Property Pages, please refer to *Section 3 - Setting Up - NetWare*.

Editing using a
Web browser

If your network supports TCP/IP you may view and edit the AXIS PrintPoint 140 BJC parameter list using any standard Web browser.



Editing using FTP

The File Transfer Protocol (FTP) provides another alternative for changing the parameter settings.

UNIX, Windows and OS/2 Workstations

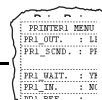
Follow the step-by-step procedure below to edit the *config* file from UNIX, Windows and OS/2 workstations, using FTP:

1. Log in to the AXIS PrintPoint 140 BJC by typing the command:
`ftp <host name>`
2. Enter `root` as user id and `pass` as password.
3. Upload the *config* file by typing: `get config`
4. Edit the file using your preferred text editor.
5. Download the *config* file by typing:
`Put config CONFIG`

Note: ☐ It is important that the edited filename is specified in block capitals. Otherwise, the edits are regarded as temporary and will be lost once the AXIS PrintPoint 140 BJC has been powered down.

Printing parameters on the printer

The current parameter list may output to a printer connected to the AXIS PrintPoint 140 BJC by double-clicking the Test button.



The Config File

The remainder of this appendix contains the complete AXIS PrintPoint 140 BJC parameter list. The left-hand column shows the parameters and their default values as they appear in the config file, and the right column contains brief descriptions of the parameters.

Most parameters will take effect in the print server for the next incoming print job after being changed. However, those parameters marked (*Requires Restart*), will require the print server to be restarted before the new parameter setting can take effect.

Please note that the password relates to parameters, e.g. ROOT_PWD, will only be shown when logged in as *root*, i.e. not when printing the parameters using the Test button.

--- CONFIG MENU

NODE_ADDR.	: 00 40 8C 10 00 86	Node Address
BASE_URL.	: WWW.AXIS.COM	Default Base URL Address
ROOT_PWD.	: pass	Root Password

--- TCP/IP MENU

TCP_ENB.	: YES	TCP/IP Protocol Enabled
INT_ADDR.	: 0 0 0 0	Internet Address
DEF_ROUT.	: 0 0 0 0	Default Router Address (<i>0.0.0.0 for no router</i>)
NET_MASK.	: 0 0 0 0	Net Mask (<i>e.g. 255.255.255.0 for class C, 0.0.0.0 for auto-sense</i>)
LPD_BANN.	: OFF	LPD Banner Page Disabled
DHCP_ENB.	: NO	DHCP Protocol Enabled
BOOTP_ENB.	: YES	BOOTP Protocol Enabled
RARP_ENB.	: YES	RARP Protocol Enabled

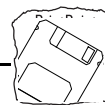
--- NETWARE MENU

NETW_ENB.	: YES	NetWare Protocol Enabled
PS_NAME.	: AXIS100086	Print Server Name (<i>100086 are the last six digits of the serial number</i>)
JOB_CHECK_DELAY.	: 5	Print Server queue polling interval
CONF_CHECK_DELAY.	: 300	Interval between automatic configuration checks
FR_802_3.	: YES	IEEE 802.3 Frame Type Enabled
FR_ETH_2.	: YES	Ethernet II Frame Type Enabled
FR_802_2.	: YES	IEEE 802.2 Frame Type Enabled
FR_SNAP.	: YES	SNAP Frame Type Enabled
NCP_BURST_MODE.	: YES	NetWare Burst Mode Enabled (<i>Requires Restart</i>)
PSERVER_NDS.	:	File server & Name of print server (including context)
PSERVER_BINDERY1.	:	Bindery file server name
PSERVER_BINDERY2.	:	Bindery file server name



Appendix B: The Parameter List

PSERVER_BINDERY3.	:	Bindery file server name
PSERVER_BINDERY4.	:	Bindery file server name
PSERVER_BINDERY5.	:	Bindery file server name
PSERVER_BINDERY6.	:	Bindery file server name
PSERVER_BINDERY7.	:	Bindery file server name
PSERVER_BINDERY8.	:	Bindery file server name
PSERVER_BINDERY9.	:	Bindery file server name
PSERVER_BINDERY10.	:	Bindery file server name
PSERVER_BINDERY11.	:	Bindery file server name
PSERVER_BINDERY12.	:	Bindery file server name
PSERVER_BINDERY13.	:	Bindery file server name
PSERVER_BINDERY14.	:	Bindery file server name
PSERVER_BINDERY15.	:	Bindery file server name
PSERVER_BINDERY16.	:	Bindery file server name
NPRINTER1.	:	Print Server name. Slot
NPRINTER2.	:	Print Server name. Slot
NPRINTER3.	:	Print Server name. Slot
NPRINTER4.	:	Print Server name. Slot
NPRINTER5.	:	Print Server name. Slot
NPRINTER6.	:	Print Server name. Slot
NPRINTER7.	:	Print Server name. Slot
NPRINTER8.	:	Print Server name. Slot
--- NetBIOS/NetBEUI MENU		
LSLM_ENB.	:	YES LAN Server/LAN Manager Protocol Enabled
NB_FR_TYPE.	:	FR_AUTO (FR_AUTO, FR_802_2, FR_DIX) Frame Type <i>(Requires Restart)</i>
LPRINT_1.	:	AX100086.LP1 Printer 1 Name <i>(100086 are the last six characters of the serial number)</i>
--- OUTPUT MENU		
L1_CENTR.	:	HISPEED (IBM_PC, STNDRD, FAST, HISPEED) LPT1 Centronics Interface Timing
L1_BSYTM.	:	60 LPT1 Busy Status Time-Out. All status reporting disabled if set to 0.



Appendix C Updating the Software

The following software can be updated free of charge:

- AXIS NetPilot™ configuration software
- AXIS Print Monitor for Windows 95 and Windows NT
- AXIS Print Utility for Windows
- AXIS Print Utility for OS/2
- The AXIS PrintPoint 140 BJC print server software held in Flash Memory

Obtaining the Updated Software

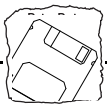
Over the Internet

You may wish to check the Axis WWW Home Page at <http://www.axis.com/>, where you can download the latest versions of the software utilities.

Anonymous FTP

Files and information are also available through anonymous FTP: log in to <ftp.axis.com> and go to the /pub/axis directory.

Flash Memory The AXIS PrintPoint 140 BJC server software is stored in Flash Memory. This memory is provided by a silicon chip that like any other ROM device, retain data content even after power is removed. However, Flash Memory is unique because it allows its data to be erased and re-written. This means that you can install software updates for your AXIS PrintPoint 140 BJC as soon as they come available, without having to replace any parts. The new software is simply loaded into the AXIS PrintPoint 140 BJC over the network.



Web Browser Support

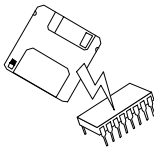
Because the AXIS PrintPoint 140 BJC supports the HTTP protocol over TCP/IP, you may download the latest software releases directly from the Software Upgrade Page.

To display the Software Upgrade Page, simply click the 'Software upgrade' link within the Management Page. By following the instruction provided, you may then automatically initiate a file transfer between the Axis Public Archive Server and your workstation. Once the transfer is complete, you should then download the image file to the AXIS PrintPoint 140 BJC using FTP, as described in *Upgrading over the Network using FTP, on page 75*.

Your dealer

Contact your dealer to check if there have been any new releases of the software. You should have your present version number ready to compare against the latest software release.

Upgrading the Software



There are three methods with which you can update to the AXIS PrintPoint 140 BJC Flash memory:

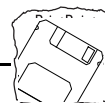
- using the AXIS NetPilot™ over IPX/SPX, **or**
- over the network using FTP on a TCP/IP network, **or**
- through the parallel port LPT1,

The preferred methods are described below.

Note: ☐ Updating instructions are also supplied with the software update.

Updating Using the AXIS NetPilot™

This is the most convenient method for updating AXIS Network Print Server Software. An Installation Wizard is available to guide you through the necessary procedures, simply click the Upgrade icon of the AXIS NetPilot™ Toolbar to display the Upgrade Wizard menu.



Upgrading over the Network using FTP

To upgrade over the network using FTP, you will need the following:

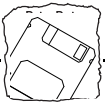
- The file with the new print server software. The name of this file is in the form *product.version*, e.g. 140_524.exe for software release 5.24. You may use any of the aforementioned methods to obtain the new file.
- The AXIS PrintPoint 140 BJC must also be installed on the network with TCP/IP as described in *Basic Set Up for TCP/IP*, on page 22.

Follow the procedures below to upgrade the AXIS PrintPoint 140 BJC:

1. Log in to the AXIS PrintPoint 140 BJC with the command `ftp <host name>` where `<host name>` is the name assigned in your system host table.
2. You will be prompted for user id and password. Use the user id `root`, which has the default password `pass` (root the user id with the highest priority).
3. Issue the command `binary` to change to binary transfer mode.
4. Issue the command `put <software name> flash` where `<software name>` is the name of the new print server software, e.g. 140.524.
5. Wait for the Flash load to finish. This normally takes 1 to 4 minutes. The unit will then automatically restart with the new print server software.

Caution

- ☐ Be careful not to interrupt the file transfer. If the transfer is interrupted the AXIS PrintPoint 140 BJC may have to be re-initialized by your dealer.
6. Log out using the command `quit`, `bye` or `exit` depending on your FTP version.



Notes:

- ❑ Should you encounter any problem that prevents a successful upgrade over your network, it may become necessary to perform the flash loading operation via the parallel port, LPT1. In this instance, you are advised to contact your dealer, or Axis via the WWW. Please refer to *Appendix E - How To Contact Axis*.

Appendix D Technical Specifications

Supported Systems

Novell NetWare:	<p>Versions 3.11, 3.12, 4.10 and above, supporting both NDS and Bindery Emulation. At least 16 bindery file servers and 96 print queues can be served. User messages are also supported.</p> <p>Print Methods: RPRINTER/NPRINTER, PSERVER.</p>
IBM LAN Server:	<p>LAN Server 4 and above, running under OS/2 ver 1.3 and above including OS/2 Warp, OS/2 Warp Connect.*</p>
Microsoft Windows:	<p>Windows NT ver. 4.0 and above, Windows for Workgroups, Windows 95.</p>
LANtastic	<p>Windows for Workgroups and Windows 95 clients using LANtastic 7.0 and above.</p>
WWW:	<p>Netscape Navigator 3.0, MS Internet Explorer 3.0, or compatible Web browsers.</p>

Supported Protocols

NetWare:	IPX, SAP, RIP, SPX, NCP (extended with NDS) and LIP.
Windows and OS/2:	NetBIOS/NetBEUI or TCP/IP.
TCP/IP:	LPD, FTP, BOOTP, DHCP, ARP, RARP, ICMP, IP, TCP, UDP, HTTP.

Network Management Print server status in NWAdmin/P_CONSOLE.

Hardware 32 bit RISC Controller, 512 kbytes Flash memory, 128 kbytes RAM.

Front Panel 2 LED indicators: Power and Network. Push button for printouts.

Logical Connection Running simultaneously any combination of the supported protocols. Use of IEEE802.2, IEEE802.3, SNAP and Ethernet II frame types simultaneously.

Attachments RJ-45 connector 10baseT (Twisted Pair) Ethernet.

Security

NetWare: Encrypted passwords.

Parallel Printer One IEEE 1284 compliant high-speed parallel port, 36-pin Centronics connector. Sustained throughput up to 390 kbytes/s using NetWare or LAN Server/LAN Manager.

Supported Printers Canon Bubble Jet printers are supported. Extended printer status is available only for certain models. Neither support for Laser Printers nor Windows Printing Systems.

Power Consumption Power provided by external supply.
Maximum 170 mA at 12 VDC. (Type PS-A, 9 V, 300 mA).

Dimensions Height x Width x Depth
1.1 x 2.2 x 4.7 inches (2.7 x 5.6 x 11.8 cm)

Weight 0.26 lb. (0.12 Kg)

Environmental Temperature: 40 - 105° F (5 - 40° C).
Humidity: 10 - 95% non-condensing.

Approvals

EMC: EN 55022/1987, EN50082-1/1992. FCC Class A.
Safety: EN 60950.



* OS/2 printer drivers available from IBM.

All specifications are subject to change without prior notice



Appendix E How To Contact Axis

Technical Support

Should you require any technical assistance, please contact your Axis dealer. If your questions cannot be answered immediately, your Axis dealer will forward your queries through the appropriate channels to ensure that you get an expedient response.

Internet and World Wide Web

If you are connected to Internet, please take the time to look at the Axis WWW Home Page at <http://www.axisinc.com/> or <http://www.axis.com/>. Here you can find information about the company and our products. You can also download on-line manuals, tools such as the Acrobat Reader for different platforms, and the latest versions of the software utilities. Your Axis dealer will be pleased to provide you with any additional assistance or information that you might require.

You may also access these pages directly from the internal Web pages of the AXIS PrintPoint 140 BJC.



The Axis WWW Home Page.



FTP

You may also obtain files and information through anonymous ftp: log in to **ftp.axisinc.com** or **ftp.axis.com** and go to the /pub/axis directory. Alternatively, enter **ftp://ftp.axisinc.com/pub/axis** or **ftp://ftp.axis.com/pub/axis** in your WWW browser.

The Axis Offices

To contact an Axis office, choose the one nearest to your region:

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Axis Communications Inc.
4 Constitution Way, Suite G
Woburn, MA 01801-1030, USA
Phone: 1-800-444-AXIS, (617) 938-1188
Fax: (617) 938-6161
Email: info@axisinc.com
URL: <http://www.axisinc.com/>

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Email: info@axis.com.sg

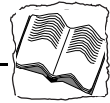


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