

Multiprotocol Switched Services (MSS) Server



Installation and Initial Configuration Guide

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Installation and Initial Configuration Guide

Note

Before using this information and the product it supports, be sure to read the general information under Appendix B, Notices.

Fourth Edition (March 1999)

This edition applies to Version 2.2 of the MSS Server.

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About This Guide

This guide explains how to set up the 8210 Nways MSS Server Model 003 (8210-003), perform the initial configuration, and identify and correct some problems that might occur during installation.

Who Should Use This Guide

This guide is intended for the person responsible for installing the 8210-003. It is assumed that this person is familiar with installation and cabling charts.

How To Proceed

The following steps describe how to install your 8210-003. You should document all of the network information that will be required to install, connect, and configure the 8210-003.

Installation

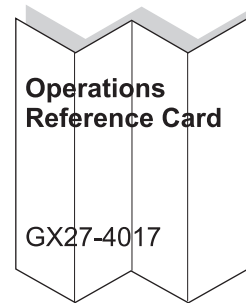
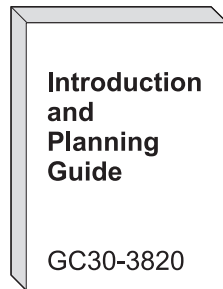
1. Install the 8210-003. Chapter 1, *Installing the MSS Server* describes the hardware installation procedure. Alternatively, installation by IBM service personnel is available; contact your IBM representative for additional information.
2. Contact your network administrator to determine whether you can use the default configuration or whether you need to perform an initial configuration. If the network administrator wants you to use the default configuration (see "When to Use the Default Configuration" on page 4-1), then the installation and initial configuration tasks are completed. Otherwise, you need to perform an initial configuration.

Initial Configuration

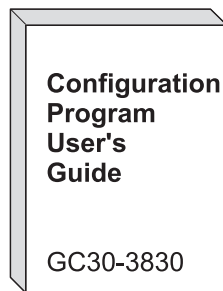
1. Access the 8210-003 as described in Chapter 3, *Accessing the MSS Server*.
2. Perform the initial configuration as instructed in Chapter 4, *Performing Initial Configuration of the MSS Server*.
3. Contact your network administrator to perform a full configuration, and refer to the *MSS Server Interface Configuration and Software User's Guide* and the *MSS Protocol Configuration and Monitoring References* provided in softcopy with the 8210-003.

MSS Server Library Overview

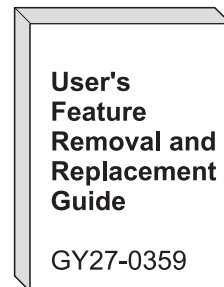
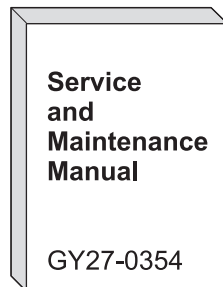
Planning and Installation



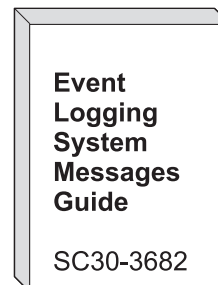
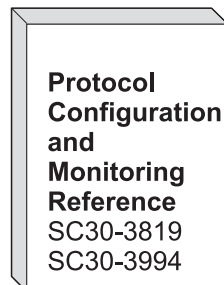
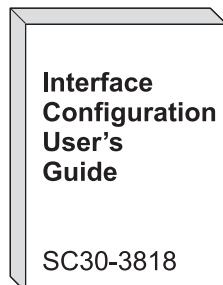
Configuration



Diagnostics/Maintenance



Operations and Network Administration



The following IBM hardcopy manuals are shipped with the product. The manuals in this list are also included in displayable softcopy form on the MSS Softcopy Library CD-ROM (LK2T-0378). This CD-ROM is shipped with initial orders for the 8210-003.

The reference card and the safety information booklet are shipped in hardcopy only and are not included on the CD-ROM.

- *MSS Server Installation and Initial Configuration Guide*, GA27-4140
- *8210 Nways MSS Server Operations Reference Card*, GX27-4017
- *8210 Nways MSS Server User's Feature Removal and Replacement Guide*, GY27-0359
- *Caution: Safety Information - Read This First*, SD21-0030

The following manuals are not shipped in hardcopy, but are provided in softcopy form on the MSS Softcopy Library CD-ROM. All of these manuals (with the exception of the *Event Logging System Messages Guide*) can be separately ordered in hardcopy form through your IBM marketing representative.

- *MSS Server Introduction and Planning Guide*, GC30-3820
- *MSS Server Service and Maintenance Manual*, GY27-0354
- *MSS Server Interface Configuration and Software User's Guide*, SC30-3818
- *MSS Protocol Configuration and Monitoring Reference, Volume 1*, SC30-3819
- *MSS Protocol Configuration and Monitoring Reference, Volume 2*, SC30-3994
- *Configuration Program User's Guide for Nways Multiprotocol Access, Routing and Switched Services*, GC30-3830
- *Event Logging System Messages Guide*, SC30-3682

Accessing the MSS Server Softcopy Library

Important: Whether you choose to read the softcopy MSS Server publications directly from the CD-ROM or to copy the individual books to your hard disk, you must first install the Library Reader program (contained on the CD-ROM) on your workstation to enable you to view the publications. Alternatively, you can view the PDF files using a Web browser.

The *MSS Server Softcopy Library* (included with the CD-ROM) describes how to install the Library Reader and how to access the softcopy books from a personal computer or PS/2 computer running DOS, Windows, or OS/2.

For more information, see the *Online Reference Library* that is on the CD-ROM.

Visit Our Web Sites

You can obtain the latest information on and support for the MSS Server by visiting our Web sites.

Information Updates and Corrections

To remain informed of engineering changes, clarifications, and fixes that are implemented after the manuals have been printed, refer to the IBM MSS Server home page at:

<http://www.networking.ibm.com/820/820prod.html>

Online Support

To obtain support information, including technical tips, current product information, and code updates and fixes for the MSS Server, refer to the IBM Networking Tech Support page at:

<http://www.networking.ibm.com/netsupt.html>

Summary of Changes

This manual has been revised to include the following changes and enhancements:

- 233-MHz 740 PowerPC processor
- Replacement of the ATM adapters with new, enhanced performance ATM adapters

The technical changes and additions are indicated by a vertical line (|) to the left of the change.

All packaging and other features remain the same as in the previous release.

Chapter 1. Installing the MSS Server

These instructions explain how to unpack and rack-mount or surface-mount the 8210 Nways MSS Server Model 003 (8210-003), attach the cables, and verify that the hardware is working correctly.

If you have any problems during setup, refer to Chapter 2, Problem Solving.

Before You Begin

Before you begin, you need to be aware of the following requirements concerning cabling and rack-mounting the 8210-003.

Cabling

ATM or FDDI adapter cables are not provided and must be separately ordered. You can order them through your IBM representative.

Rack-Mounting

If you choose rack-mounting, you must provide the rack; it is not provided with the 8210-003.

You can use any EIA standard 19-inch rack. The rack can be open or closed. However, if you choose a closed rack, you must make sure that enough air flows through the 8210-003. To let air pass, you must remove or modify covers on the front of the rack that, otherwise, would not let air reach the 8210-003. Similarly, you must not use unvented rear rack covers that would not let air exit from the 8210-003 or would cause back pressure to build up from several machines.

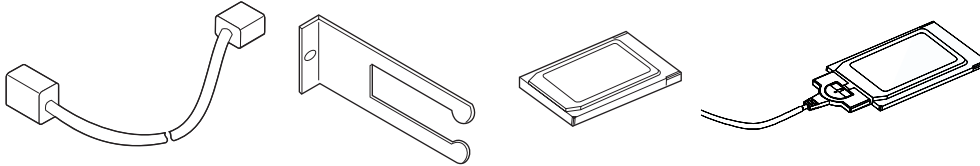
1. Verify contents

Verify that the following items are included with your 8210-003:

Hardware

One or two adapters (as ordered)

- 155-Mbps ATM adapter, multimode
- 155-Mbps ATM adapter, single-mode
- Dual-ring optical fiber FDDI adapter



Power
Cord

Cable
Management
Bracket

PCMCIA
Flash Drive
(Optional)

PCMCIA
Modem and
Cable

If any item is missing or damaged, contact your place of purchase.

Documentation

In addition to this document, the package should include the following items:

- *MSS Server Operations Reference Card, GX27-4017*
- *8210 Nways MSS Server User's Feature Removal and Replacement Guide, GY27-0359*
- *MSS Softcopy Library (on CD-ROM)*
- *Caution: Safety Information-Read This First, SD21-0030*

In addition to the above documentation, there may be Release Notes that describe changes that were received too late to be printed in the manuals.

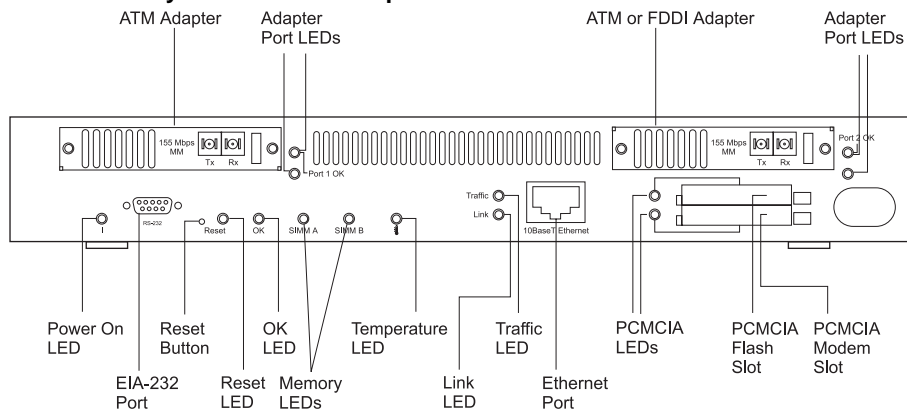
Software

- Configuration Tool Program package (on CD-ROM)

You will also need

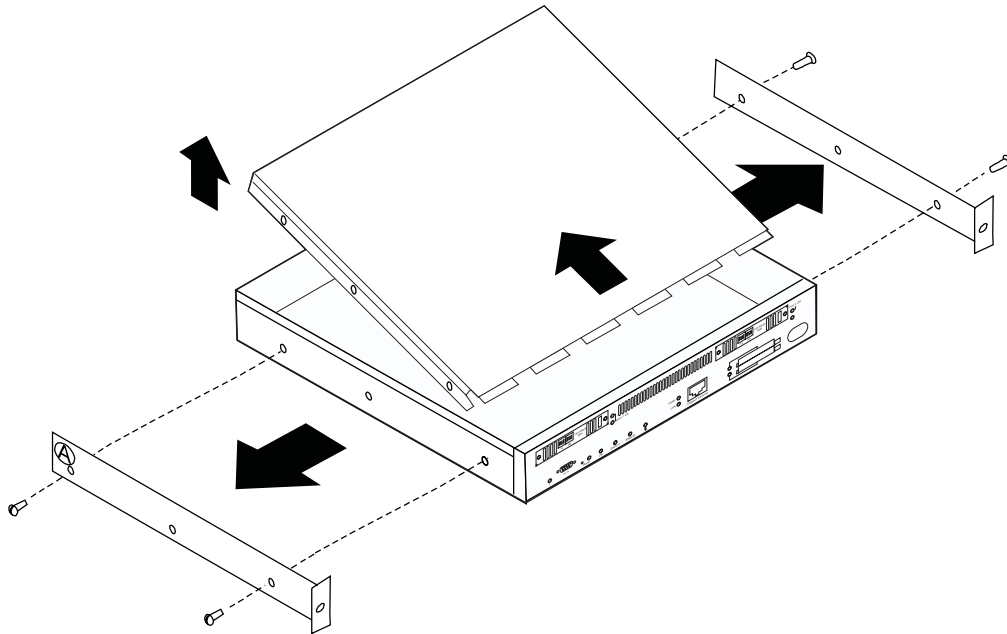
- One adapter cable for each adapter (separately purchased and not in this shipping container)
- A Rack Inventory Chart and Cabling Chart from your network administrator

2. Familiarize yourself with front panel



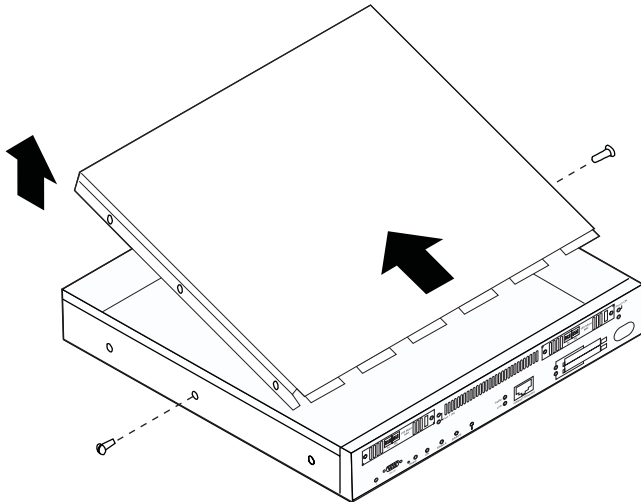
Important: Before you begin installing the 8210-003, read Appendix C, Safety Information.

3. Remove brackets



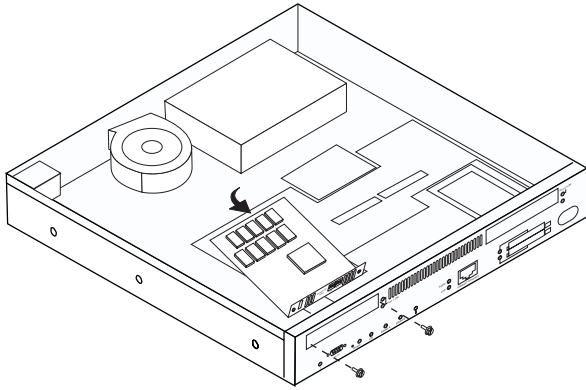
Remove the two screws on each side of the 8210-003. Pull the side brackets away from the sides of the 8210-003 and set aside.

4. Remove top cover



Remove the central screws on each side of the 8210-003. Lift the rear edge of the top cover and pull it to the rear of the 8210-003 to disengage the tabs on the top cover that engage the front of the 8210-003. Lift up the rear of the top cover, and pull it up and away from the front of the 8210-003.

5. Install ATM adapter in slot 1



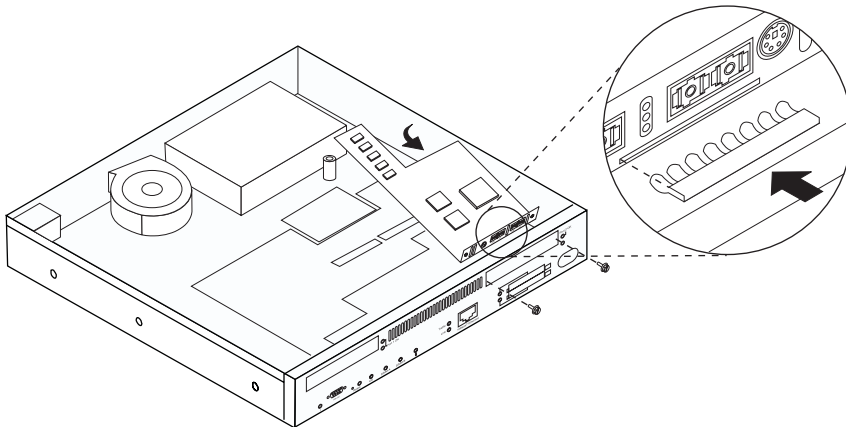
Note: Only ATM adapters can be installed in Port 1 (left slot).

Holding the adapter by the back edge, position it vertically inside the front of the 8210-003 chassis, aligning it with the opening of Port 1.

Gently rotate the back of the adapter towards the bottom of the chassis, aligning the edge tabs with the connector on the PCI logic card. Carefully seat the edge tabs in the PCI logic card connector.

Install the two flat-head screws on the adapter faceplate.

6. Install ATM or FDDI adapter in slot 2



Note: FDDI and ATM adapters can be installed in Port 2 (right slot). This is the only slot in which FDDI adapters can be installed.

Remove the blank adapter faceplate from the front of the 8210-003. Remove the copper-colored ground clip from the bottom of the blank faceplate and attach it to the bottom of the adapter's faceplate so that the fingers are pointing to the back of the adapter.

If you are installing a FDDI adapter, use a 4-mm nut driver to remove the screw holding the standoff on the bottom of the chassis and in front of the power supply. Save the screw.

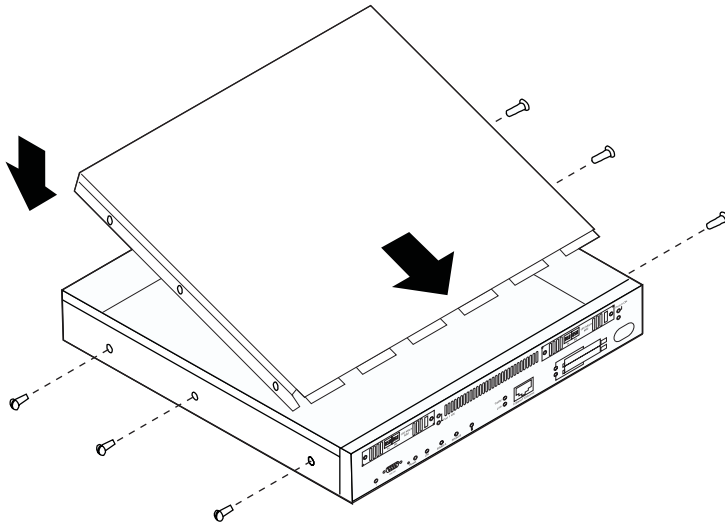
Holding the adapter by the back edge, position it vertically inside the front of the 8210-003 chassis with the faceplate resting on top of the PCMCIA connector.

Gently rotate the back of the adapter towards the bottom of the chassis, aligning the edge tabs to the connector on the PCI logic card. Carefully seat the edge tabs in the PCI logic card connector.

If you are installing a FDDI adapter, use a 4-mm nut driver to install the screw holding the back of the adapter to the standoff.

Install the two flat-head screws on the adapter faceplate.

7. Replace top cover

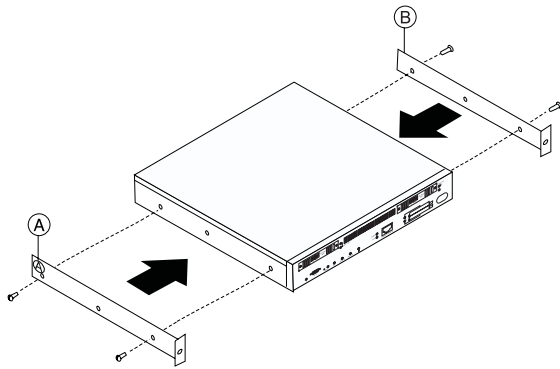


Align the top cover tabs with the slots inside the front of the 8210-003 and slide the top cover forward until the tabs engage the slots.

If you intend to surface-mount your 8210-003, reinstall the three screws on each side of the 8210-003 and go to step 9.

If you intend to rack-mount your 8210-003, reinstall the middle screw only and continue with step 7.

8. Position mounting brackets

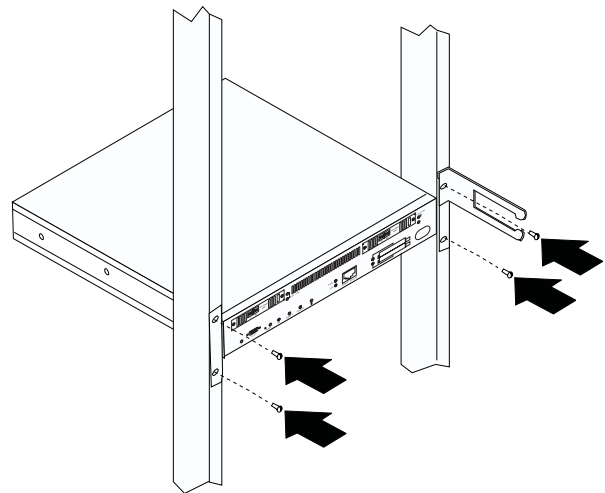


Remove the four screws (two on each side) that hold the rack-mounting brackets.

Note: Do not remove the center screws; they secure the cover.

Each rack-mounting bracket is labeled A or B. The letters can be seen after the brackets have been removed and rotated. Rotate the brackets and reattach them as shown.

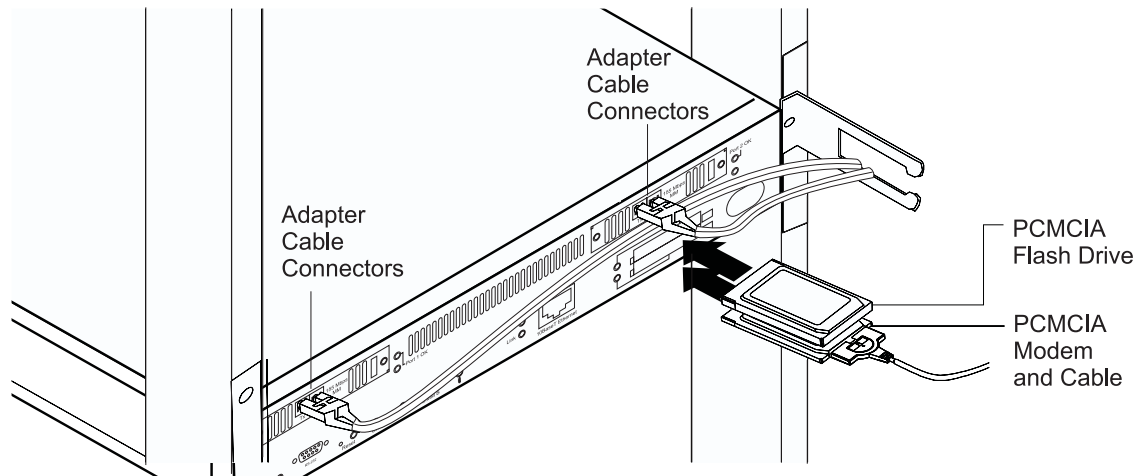
9. Install unit in rack



Use the Rack Inventory Chart provided by your network administrator to determine where you will mount the 8210-003 in the rack.

Position the unit in the rack and tighten the bracket or rack screws.

10. Install PCMCIA device and attach cables



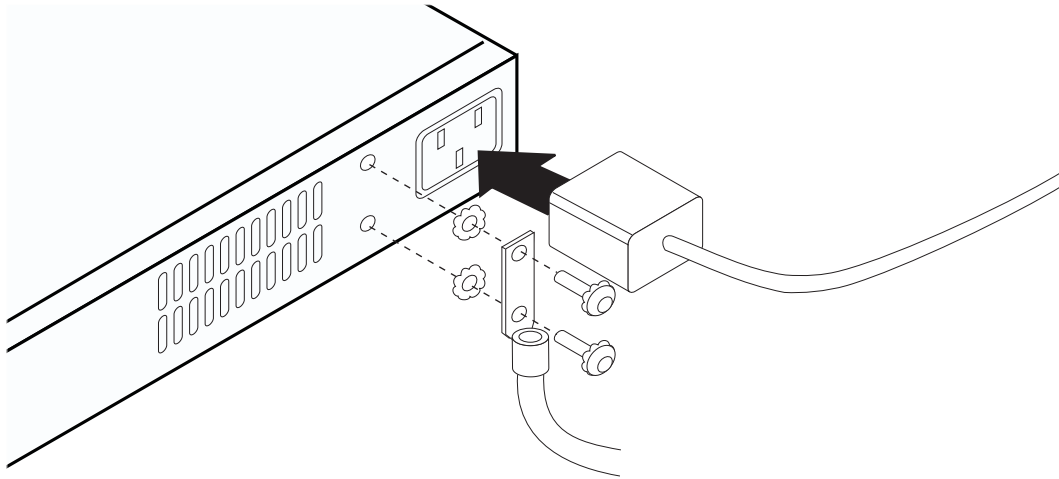
Note: Correct installation according to these instructions is a condition for compliance with the regulations of electromagnetic interference. See Appendix B, Notices for additional information.

Install the PCMCIA modem in the bottom PCMCIA slot and verify that it is correctly seated in the slot. Install the modem cable and pass it through the cable management bracket.

Install the PCMCIA flash drive in the top PCMCIA slot and verify that it is correctly seated in the slot.

Attach the adapter cables to the corresponding adapter ports and pass the cables through the cable management bracket.

11. Apply power to the unit and verify correct operation of the unit



If you want to attach a frame ground, remove the two screws and lock washers next to the ac power cord plug on the back of the unit. Thread each screw first through the ground wire terminal or ground wire and then through a lock washer. Reinstall the two screws, with the attached lock washers and ground wire, on the chassis.

Note: It is recommended that you use a listed, 2-hole compression terminal as the ground wire terminal to connect the ground wire to the chassis.

Connect the power cord to the ac appliance inlet on the back of the unit.

Important: Before you connect the power cord, read “Power Disconnect” on page C-4.

Connect the power cord to a power source, wait one minute, and verify that:

- The Power on LED labeled | (at the left of the EIA-232 connector) is ON (green).
- The OK LED is ON (green).

See Chapter 2, Problem Solving if the LEDs are not lighted as described.

12. Record Information

Transfer relevant information from the cabling chart and the unit labels to the fanfold reference card and store it in a safe place.

Hardware installation is complete.

13. Contact Network Administrator

Inform your network administrator that you have installed the 8210-003 and it is operating correctly. Provide that person with the access number for the modem in your 8210-003.

After installation, the 8210-003 must be configured to be fully operational. The 8210-003 is shipped with a default configuration that allows it to be configured remotely as described in "When to Use the Default Configuration" on page 4-1.

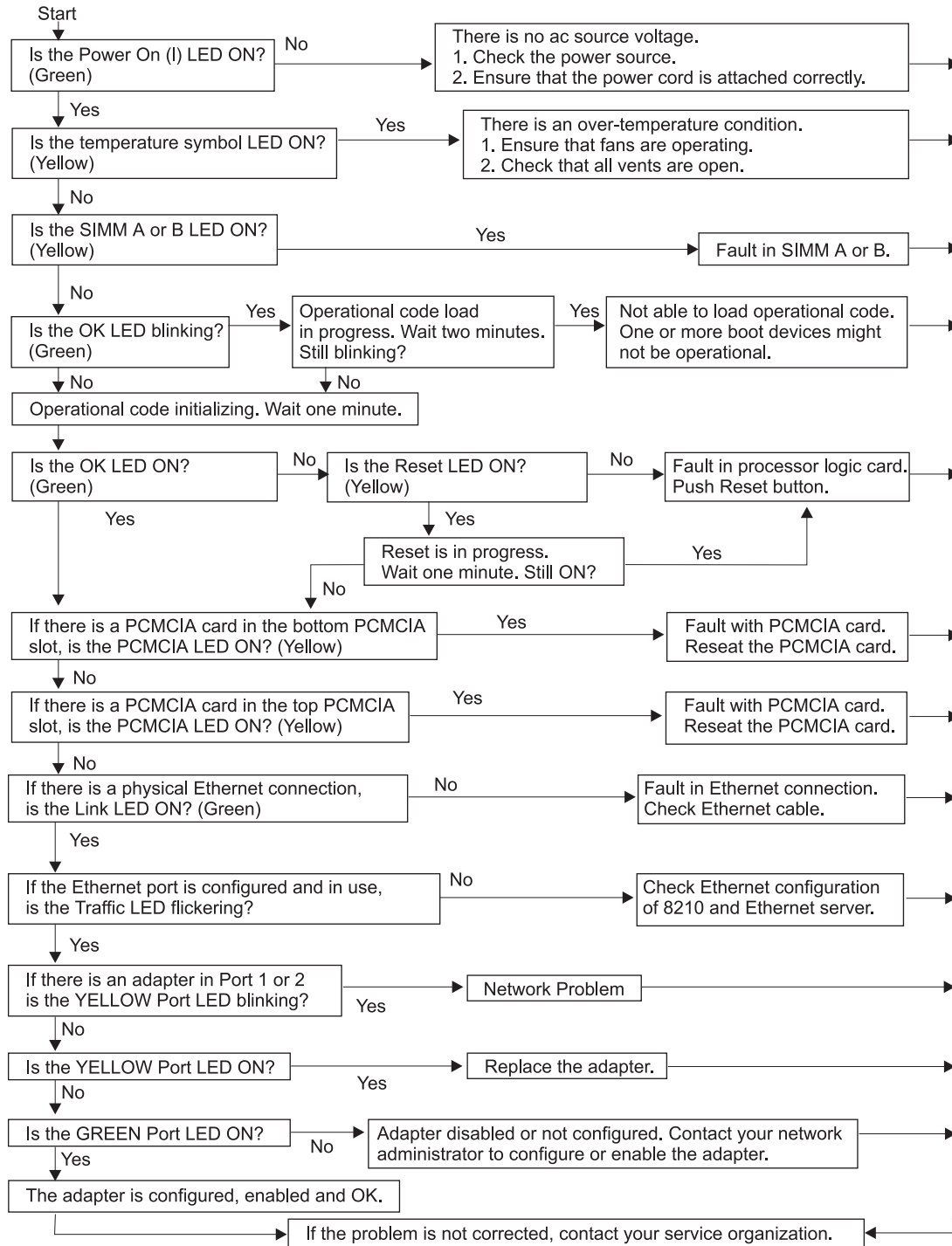
In most cases, your network administrator will not want to use this default configuration when performing the (full) configuration. Instead, the network administrator will want you first to set up a local configuration console (see Chapter 3, Accessing the MSS Server), and perform an initial (quick) configuration (see Chapter 4, Performing Initial Configuration of the MSS Server).

When you are finished with the initial configuration, inform your network administrator, who can perform the full configuration.

Hardware installation and initial configuration are complete.

Chapter 2. Problem Solving

To identify and correct any problems that occur during setup, see the following chart.



Chapter 3. Accessing the MSS Server

This chapter describes the methods supported for accessing the 8210-003.

Methods of Connecting

There are four methods of connecting to the 8210-003:

- A teletype (TTY) connection
- A serial line IP (SLIP) connection
- An Ethernet connection
- The ATM network

TTY, SLIP, and Ethernet are considered *out-of-band* connections. Out-of-band connectivity is usually employed when the ATM network is not operational or when the 8210-003 has not been configured yet. Therefore, if you are performing an initial (quick) configuration, you should use an out-of-band method (usually TTY).

The connection via the ATM network is *in-band*. In-band connectivity requires IP connectivity over the 8210-003's ATM network attachment. To enable in-band IP connectivity, you must configure one of the following connectivity methods on your workstation:

- Classical IP client or server
- LAN emulation client to which an IP address has been assigned
- IP host services

Note: The 8210-003 is shipped with a default configuration that allows in-band access to the 8210-003 from a workstation running Classical IP. Use caution when installing the 8210-003 in your network with the default configuration. See "When to Use the Default Configuration" on page 4-1 for more information about the default configuration.

In-band and out-of-band connectivity are discussed in detail in the following sections.

TTY Connection

For this method, you have three alternatives:

- A local connection through a null modem cable attached to the EIA-232 service port (see Figure 3-1 on page 3-2)
- A remote connection through a modem attached to the EIA-232 service port (see Figure 3-2 on page 3-2)
- A remote connection through the PCMCIA modem, the Voice/Data/Fax PCMCIA Modem, or the Data/Fax PCMCIA Modem (see Figure 3-3 on page 3-3)

You can set up both remote and local connections, but only one connection can be active at any given time. For example, if a workstation is connected locally to the EIA-232 service port and a call comes in over the Voice/Data/Fax PCMCIA Modem or the Data/Fax PCMCIA Modem, priority is given to the call. After the call, the workstation will have to log back into the 8210-003.

Either connection, local or remote, must be made using communications software that enables terminal emulation and file transfer. You can continue to use local or remote access to the 8210-003 after it has been configured.

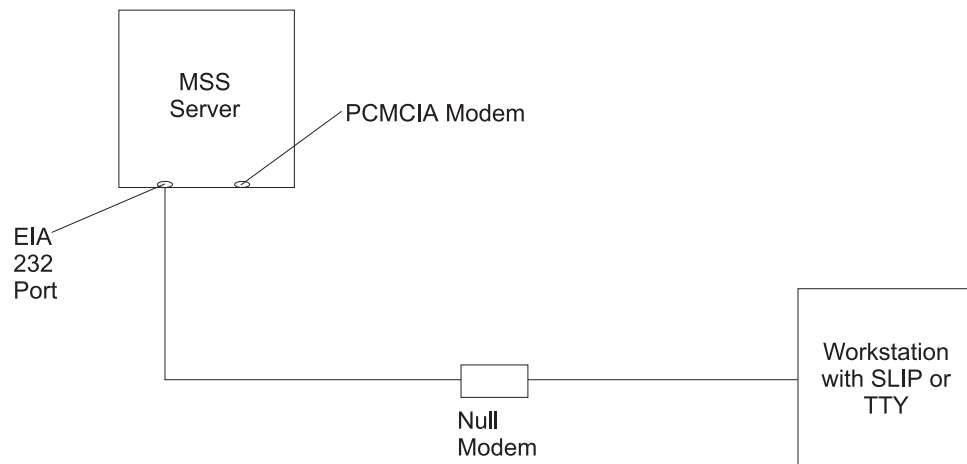


Figure 3-1. Local Serial Connection to the EIA-232 Port

Note: Refer to Chapter 3 of the *MSS Server Introduction and Planning Guide* for pin assignments for the null-modem cable.

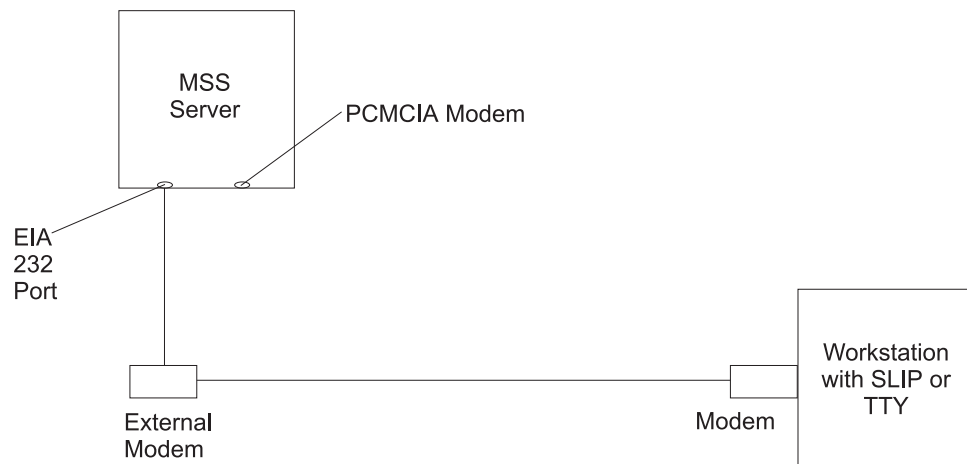


Figure 3-2. Remote Serial Connection to the EIA-232 Port

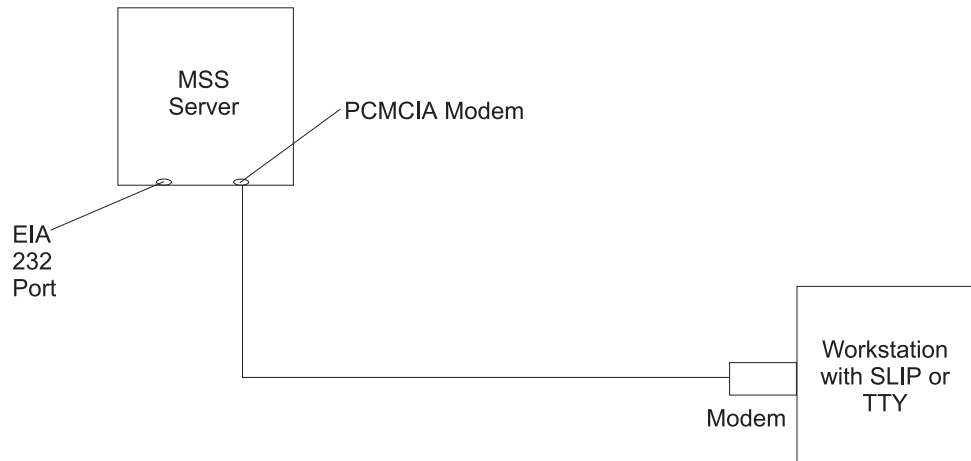


Figure 3-3. Remote Serial Connection to the PCMCIA Modem (Voice/Data/Fax PCMCIA Modem or Data/Fax PCMCIA Modem)

Local and Remote Console Access

When accessing the 8210-003 locally on a null modem cable attached to the EIA-232 service port or remotely through the PCMCIA modem, use VT220 or VT100 terminal emulation. Because VT100 does not define function keys above F4, when using VT100, edit the keyboard mapping for your terminal emulation as follows:

- For key definition F6, enter the mapping (ESC)OU.
- For key definition F9, enter the mapping (ESC)(Left square bracket)009q.

Note: (ESC) represents the carat symbol followed by the left square bracket.

Default Settings for Serial Port

These are the default settings for the serial port:

Speed	19.2 Kbps
Parity	None
Data Bits	8
Stop Bits	1

Once the 8210-003 operational code has loaded, the line speed for the serial port is automatically set to 19.2 Kbps.

Default Settings for PCMCIA Modem

The PCMCIA modem is either a 28.8-Kbps V.32 or a 56-Kbps V.90 bis modem. It is set up with a default speed of auto-detect.

Note: At the time of this printing, the 28.8-Kbps V.32 bis modem is still being shipped with the 8210-003.

These are the default settings for PCMCIA modem:

Speed	Auto-detect
Parity	None
Data Bits	8
Stop Bits	1

SLIP Connection

Over the local or remote connection described in “TTY Connection” on page 3-1, you can choose to use the SLIP protocol instead of the TTY connection. Using SLIP requires TCP/IP on the workstation that connects to the 8210-003.

To configure SLIP, use these addresses:

The default SLIP address of 8210-003 10.1.1.2

The default IP address of the workstation 10.1.1.3

For instructions about installing SLIP, refer to the documentation for your version of TCP/IP.

Ethernet Connection

Through a 10BASE-T Ethernet cable attached to the Ethernet service port, you can use Telnet (see Figure 3-4). Using Telnet requires TCP/IP on the workstation that connects to the 8210-003.

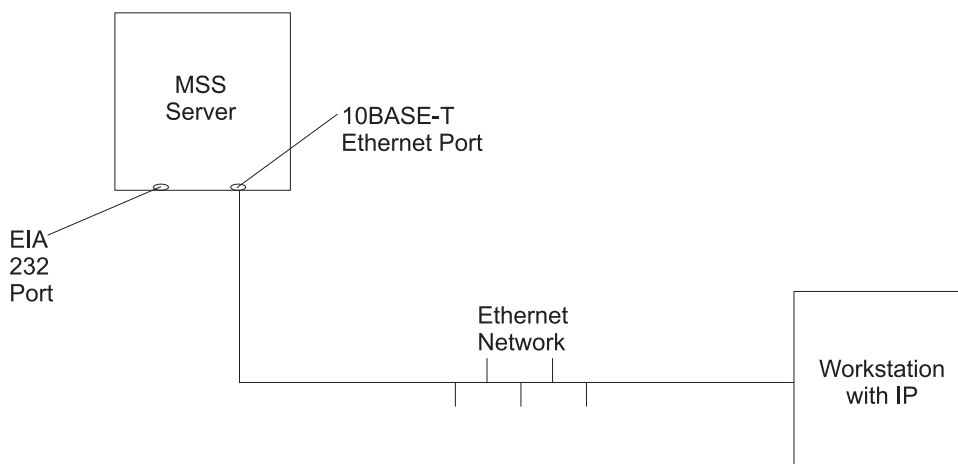


Figure 3-4. Connection Using IP through the Ethernet Port

To use Telnet over the Ethernet connection, use these addresses:

The default IP address of the 8210-003 10.1.2.2

The default IP address of the workstation and gateway 10.1.2.3

The default subnet mask of the 8210-003 255.255.255.0

For instructions about using Telnet over Ethernet, refer to the documentation for your version of TCP/IP.

If you need to change these default IP addresses, refer to the firmware section of *MSS Server Interface Configuration and Software User's Guide*.

ATM Network Connection

Figure 3-5 shows an in-band connection over the ATM network. The 8210-003 or the module must be operational in the network to use this connection.

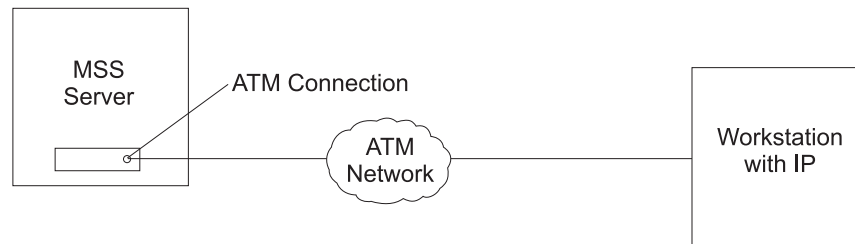


Figure 3-5. Connection Using IP Over the ATM Network (shown with the 8210-003)

You can access the 8210-003 via the ATM network only after it has been configured fully or by using the default configuration. Therefore, for an initial (quick) configuration, you usually use one of the previous three connection methods—TTY, SLIP, or Ethernet—described in this chapter. See Chapter 4, Performing Initial Configuration of the MSS Server for more information on initial configuration.

After you have completed the initial configuration, you have to reload the 8210-003 to activate the configuration. After this reload, the 8210-003 is operational in the network, and you can access it via a LAN emulation or a Classical IP client.

Chapter 4. Performing Initial Configuration of the MSS Server

This chapter describes the default configuration, when and how to perform an initial (quick) configuration to enable the 8210-003 to communicate with the network, and discusses full configuration of the 8210-003.

When to Use the Default Configuration

To configure the 8210-003 remotely, use the default configuration that is shipped with the 8210-003. The goal of the default configuration is to provide you with the capability to download a configuration to the 8210-003 that is appropriate for your network. The default configuration enables you to configure the 8210-003 remotely from a Classical IP workstation in the network using the Configuration Program via Telnet, the command line interface via Telnet, or the Web browser interface.

Notes:

1. The default configuration is not intended for normal operation.
2. If you are installing the 8210-003 in your network with the default configuration and the default configuration conflicts with other devices in your network (such as using the IP or ATM address of another device), you must use one of the out-of-band connection methods described in "Methods of Connecting" on page 3-1.
3. Connect and configure 8210-003s using the default configuration one at a time. Conflicts arise if multiple 8210-003s, using the default configuration, are connected to the network at the same time.

You can achieve connectivity through LAN switches connected to the appropriate ELAN, the serial port using a SLIP connection, using Classical IP over the native ATM attachment, or, after connection, using the Ethernet adapter.

Default Configuration Parameters

The following sections list the default configuration parameters.

LECS - General Parameters

Parameter	Value
ATM Device	0
ESI	400082100001
Selector	00

LECS - Assignment Policies

Parameter	Value
Priority	10 or 20
Policy (priority 10)	By ELAN name
Policy (priority 20)	By LAN type

Signaling Protocol

Parameter	Value
ATM	Auto detect

IP Configuration - Classical IP

Parameter	Value
Interface	0
Type	ATM
Slot	1
Port	1
IP Address	10.1.0.1
IP Subnet Mask Address	255.255.255.0
ARP Server	Enabled
Refresh	5 minutes
Auto-refresh	Enabled
ESI	40008210 0001
Selector	00
Maximum SDU Size	9188

Note: The ESI and selector parameters are for both a Classical IP server and client that are enabled in the default 8210-003 configuration. These values are required when configuring a Classical IP workstation to use the 8210-003 as its ARP server.

Emulated LAN Configuration - Token Ring

Parameter	Value
Name	TRelan1
Device	0
LES/BUS ESI	40008210 0001
LES/BUS Selector	04
Policies (Name)	TRelan1
Policies (Type)	Token Ring

LEC Interfaces - Token Ring

Parameter	Value
Interface	1
MAC Address	40008210 0001
Name	TRelan1
Type	Token Ring
Device	0
ESI	40008210 0001
Selector	02

IP Configuration - Token-Ring LAN Emulation

Parameter	Value
Interface	1
LEC	TRelan1
IP Address	10.1.1.1
IP Subnet Mask	255.255.255.0

Emulated LAN Configuration - Ethernet

Parameter	Value
Name	ETHelan1
Device	0
LES/BUS ESI	400082100002
LES/BUS Selector	04
Policies (Name)	ETHelan1
Policies (Type)	Ethernet

LEC Interfaces - Ethernet

Parameter	Value
Interface	2
MAC Address	400082100002
Name	ETHelan1
Type	Ethernet
Device	0
ESI	400082100002
Selector	02

IP Configuration - Ethernet LAN Emulation

Parameter	Value
Interface	2
LEC	ETHelan1
IP Address	10.1.2.1
IP Subnet Mask	255.255.255.0

SNMP Communities

Parameter	Value
Name	Public
Access Type	Read/write

When to Perform an Initial Configuration

If you have a new 8210-003 and do not want to use the default configuration, if you have cleared the 8210-003's configuration, or if you have encountered a problem that cleared the configuration, you must perform the steps in "Performing an Initial (Quick) Configuration" on page 4-4 before the 8210-003 can be operational in the network.

If you currently have a configuration (for example, the default configuration), you can clear it by performing the following steps:

1. From the prompt for OPCON, which is an asterisk (*), type **talk 6**. The prompt `Config>` appears.
2. Enter **boot**. The prompt `Boot config>` appears.
3. Enter the following commands in sequential order:
 - a. **clear all**
 - b. **clear device**
 - c. **exit**
 - d. **write**

4. Reboot the 8210-003.

Note: The Quick Configuration program assumes many defaults, some of which may not be appropriate for your installation. It is therefore advisable to take the following steps:

1. Use Quick Configuration to create only a partial configuration.
2. Restart the 8210-003 by entering the **restart** command.
3. Configure the 8210-003 fully from a TCP/IP station using one of the other configuration methods (the command line interface, the Configuration Program, or the Web browser).

Performing an Initial (Quick) Configuration

Before starting the Quick Configuration process, read these notes:

- Information shown in brackets [], is the default. To use the default, press **Enter**. To use a value other than the default, choose from the values in the parentheses. If no value appears in the brackets, there is no default and you must type a value.
- To start or restart Quick Configuration from the `Config>` or `Config (only)>` prompt, type **qc** and press **Enter**.
- To return to the beginning of the current Quick Configuration section at any time, type **r**. For example, if you are in the Bridging Configuration section, type **r** and press **Enter** to return to the beginning of that section.
- To exit from Quick Configuration, type **q** and press **Enter**. The `Config>` prompt will appear. Type **qc** and press **Enter**.
- When you have completed your configuration, you must restart the MSS Server for the configuration to take effect. At the end of the Quick Configuration program, you are given that option.

To start the Quick Configuration process:

1. Access the 8210-003 as described in Chapter 3, Accessing the MSS Server. The 8210-003 responds with the operator console (OPCON) prompt (*).

2. Configure the 8210-003's interface number:

- Enter **talk 6** at the * prompt.
- Enter **add dev atm** at the `Config >` prompt.

```
* talk 6
Config>
Config> add dev atm
Device Slot #(1-2) [1]?
Adding CHARM ATM device in slot 1 port 1 as interface #0
Use "net 0" to configure CHARM ATM parameter
Config>
```

3. Configure the ATM address by entering the **net** command. The ATM address should be provided by your network administrator.

```
Config> net 0
ATM user configuration
ATM Config> exit
```

4. Start the Quick Configuration program to configure interfaces and bridging and routing protocols by entering **qconfig** or simply **qc** from the Config> prompt.

Config> **qc**

The Quick Configuration program presents a series of panels.

5. **Configure LAN Emulation:**

If your configuration program platform:

- a. Uses LAN Emulation to reach the 8210-003, answer **Yes** to the Configure LAN Emulation question, supply the LAN Emulation information, and press **Enter** to accept the defaults.
- b. Uses Classical IP to reach the 8210-003, answer **No** to the Configure LAN Emulation question.

6. **Configure Bridging:**

Answer **No** to the Configure Bridging question.

7. **Configure Protocols:**

Answer **Yes** to the Configure Protocols question.

8. **Configure IP:**

- a. Answer **Yes** to the Configure IP question.
- b. If your configuration platform uses Classical IP to reach the 8210-003, answer **Yes** to the Configure IP on this interface question for interface 0, then enter the IP address at the *IP Address* prompt, enter the IP mask at the *Address Mask* prompt, and answer the ARP Server questions as appropriate.
- c. If your configuration program platform uses LAN Emulation to reach the 8210-003, answer **Yes** to the Configure IP on this interface question for any LAN Emulation interface that will communicate with the configuration program, answer **No** to the Configure IP on this interface question for any LAN Emulation interface that will **not** communicate with the configuration program, enter the IP address at the *IP Address* prompt, and then enter the IP mask at the *Address Mask* prompt.
- d. Answer **No** to the Enable Dynamic Routing question.
- e. Answer **Yes** to the Define Community question.
- f. Answer **Yes** to the read_write_trap question.
- g. Enter the community name used by the configuration program.
- h. Answer **Yes** to the Save this configuration question.

9. **Configure IPX, Booting, and Console Modem-Control:**

Answer **No** to the Configure IPX question.

10. **Write Configuration:**

Answer **Yes** to the Write Configuration question.

11. **Restart the 8210-003:**

Answer **Yes** to the Restart the 8210-003 question.

12. Save the configuration.

Attention: After you have configured the 8210-003 and it is operational, **always** back up the active configuration file. Keeping this file enables you to re-establish the 8210-003 on the network should the active configuration become corrupted.

You can back up the active configuration file by retrieving it and storing it in the workstation.

13. Notify the network administrator that the initial configuration has been completed.

Full Configuration

The initial configuration procedure you have just performed will enable you to access the 8210-003 over the network. The network administrator can now perform a full configuration of the module using any of these methods:

- Configuration Program
- Web browser HTML interface
- Command line interface (OPCON)

The Configuration Program is the preferred configuration method for these reasons:

- It can enable you to keep a number of copies of configuration files on a server for uploading to the appropriate 8210-003s.
- It does not alter any configuration parameters dynamically. This feature helps you control changes to the 8210-003 configurations.
- It performs more input validation and cross-checking of the configuration parameters than the other methods.

The command line interface and the Web browser interface cause certain parameters to be altered dynamically. The binary files that they create are saved on the 8210-003, not in the workstation. These characteristics make them more difficult to use for managing the configuration of the 8210-003. However, they can be used to monitor the operations of the 8210-003, whereas the Configuration Program cannot. They are also useful when you want to change one of the parameters that can be dynamically altered.

For the information needed to complete the configuration, refer to the *Configuration Program User's Guide*, the *MSS Server Interface Configuration and Software User's Guide*, and the *MSS Protocol Configuration and Monitoring References*.

Appendix A. Common Tasks

This appendix provides a series of questions and answers dealing with common 8210-003 installation, operation, and maintenance tasks, with suggestions as to where to find further help in performing them.

Command Line Interface

Question: How do I access the command line interface (the operating code)?

Answer: From within the firmware menu system (the System Management Services panel): press **F9**.

The command line interface is described in the *MSS Server Interface Configuration and Software User's Guide*.

Displaying a List of Active Hardware Interfaces

Question: How do I display a list of active hardware interfaces?

Answer:

1. Type **talk 6** and press **Enter** twice to reach the Config> prompt.
2. Enter **list dev**.
3. Press **Ctrl-p** to return to the command line interface.

Displaying the Operational State of the Interfaces

Question: How do I see the state (for example, up, down, disabled) of an interface?

Answer:

1. Type **talk 5** and press **Enter** twice to reach the + (monitoring) prompt.
2. Enter **configuration**.
3. Press **Ctrl-p** to return to the command line interface.

Verifying Connectivity

Question: How do I verify that a given IP address is online?

Answer:

1. Type **talk 5** and press **Enter** twice to reach the + prompt.
2. Enter **protocol**.
3. Enter **ip**. The prompt changes to IP>.
4. Enter **ping IP address value**. Press **Enter** to stop the ping process.
5. Enter **exit** at the IP> prompt. The prompt changes to +.
6. Press **Ctrl-p** to return to the command line interface.

Viewing Vital Software Data

Question: How do I view vital software data?

Answer:

1. At the * prompt, type **talk 6** and press **Enter** twice. The Config> prompt appears.
2. Enter **boot**.
3. Enter **describe**. The vital software data is displayed.
4. Press **Ctrl-p** to return to the command line interface.

Viewing Vital Hardware Data

Question: How do I view vital hardware data?

Answer:

1. Access the firmware main menu: During boot-up, press **F1** at the Prematurely terminate boot sequence prompt.
2. Select **Utilities**.
3. Select **View or Set Vital Product Data**.
4. Select **Hardware Vital Product Data**. The vital hardware data is displayed.
5. Return to the firmware main menu.
6. Press **F9** to load the operating software.

Running Quick Configuration

Question: How do I run the Quick Configuration program?

Answer: At the Config (only) prompt, enter **qc**.

Adding an Adapter

Question: How do I add an adapter when the 8210-003 is being initially configured?

Answer: First, perform hardware installation of the adapter as described in the *MSS Server Service and Maintenance Manual*. Then:

1. Access the command line interface (* prompt).
2. Type **talk 6** and press **Enter** twice to reach the Config> prompt.
3. Enter **add device** *type of device*.
For example, **add device atm**
4. Enter the device slot number (1–2).
5. Make a note of the interface number to which this port is assigned and the net number.

Note: The steps only create the interface. You still have to use the **net** command to configure characteristics unique to that interface.

You also need to use the **protocol** command to configure protocols on the interface.

Adding an Adapter after Initial Configuration

Question: How do I add an adapter after the 8210-003 has been initially configured?

Answer: First, perform hardware installation of the adapter as described in the *MSS Server Service and Maintenance Manual*. Then:

1. Access the command line interface (* prompt).
2. Type **talk 6** and press **Enter** twice to reach the Config> prompt.
3. Enter **add device** *type of device*.

For example, **add device atm**

The following two steps do not apply when a dial-circuit device is being added.

4. Enter the device slot number (1–2).
5. Make a note of the interface number to which this port is assigned and the net number.
6. Enter **net** *net number* to enable you to configure interface-unique characteristics.
7. Enter **write** to save your changes.
8. Reboot the 8210-003 to make the configuration changes active.

For details of this procedure, refer to the *MSS Server Interface Configuration and Software User's Guide*.

Disabling an Adapter Port

Question: How do I disable a configured adapter port?

Answer:

1. Access the command line interface (* prompt).
2. Type **talk 6** and press **Enter** twice to reach the Config> prompt.
3. Enter **list device**.
4. Make a note of the interface number of the port that you wish to disable.
5. Enter **disable interface** *interface number*.
6. Enter **write** to save your changes.
7. Reboot the 8210-003 to make the configuration changes active.

For details of this procedure, refer to the *MSS Server Interface Configuration and Software User's Guide*.

Enabling an Adapter Port

Question: How do I enable a configured adapter port that was disabled using the **disable interface** command (in “Disabling an Adapter Port” on page A-3)?

Answer:

1. Access the command line interface (* prompt).
2. Type **talk 6** and press **Enter** twice to reach the Config> prompt.
3. Enter **list device**.
4. Make a note of the interface number of the port that you wish to enable.
5. Enter **enable interface** *interface number*.
6. Enter **write** to save your changes.
7. Reboot the 8210-003 to make the configuration changes active.

For details of this procedure, refer to the *MSS Server Interface Configuration and Software User's Guide*.

Disabling an Adapter Port to Suspend Traffic

Question: How do I disable a configured adapter port to suspend traffic?

Answer:

1. Access the command line interface (* prompt).
2. Type **talk 5** and press **Enter** twice to reach the + prompt.
3. Enter **configuration**.
4. Make a note of the interface number of the port that you want to disable.
5. Enter **disable** *interface number*.

Enabling an Adapter Port to Resume Traffic

Question: How do I enable a configured adapter port (that was disabled using the **talk 5 disable** command in “Disabling an Adapter Port to Suspend Traffic”) to resume traffic?

Answer:

1. Access the command line interface (* prompt).
2. Type **talk 5** and press **Enter** twice to reach the + prompt.
3. Enter **configuration**.
4. Make a note of the interface number of the port that you wish to enable.
5. Enter **test** *interface number*.

Note: If you use the **test** command to enable an interface that has been configured (in **talk 6**) as disabled, the next time that you reboot the 8210-003 the interface will be disabled again.

Therefore, you should also use the **talk 6 enable interface** command to ensure that the interface is enabled the next time a reboot does occur.

For details of this procedure, refer to the *MSS Server Interface Configuration and Software User's Guide*.

Deleting an Adapter from the Configuration

Question: How do I delete an adapter from the configuration?

Answer:

1. Access the command line interface (* prompt).
2. Type **talk 6** and press **Enter** twice to reach the Config> prompt.
3. Enter **list device**.
4. On a sheet of paper, write down the interface number of the adapter you wish to delete.

Note: If you are removing a multi-port adapter, then you need to record the interface number of all interfaces configured for that adapter.

5. Enter **delete interface** *interface number*.
6. At the Are you sure? prompt, enter **y**.
7. Enter **write** to save your changes.
8. Reboot the 8210-003 to make the configuration changes active.

For details of this procedure, refer to the *MSS Server Interface Configuration and Software User's Guide*.

Up-to-Date MSS Server Information

Question: How can I find out the most current information about the 8210-003?

Answer: Point your Web browser to:

<http://www.networking.ibm.com/820/820prod.html>

Appendix B. Notices

References in this publication to IBM products, programs, or services do not imply that IBM intends to make these available in all countries in which IBM operates. Any reference to an IBM product, program, or service is not intended to state or imply that only IBM's product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any of IBM's intellectual property rights may be used instead of the IBM product, program, or service. Evaluation and verification of operation in conjunction with other products, except those expressly designated by IBM, are the user's responsibility.

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United Kingdom Homologation Compliance Statement

STATEMENT OF COMPLIANCE

The United Kingdom Telecommunications Act 1984. This equipment is approved under General Approval Number NS/G/1234/J/100003

for indirect connexions to the public telecommunications systems in the United Kingdom.

Electronic Emission Notices

Federal Communications Commission (FCC) Statement

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Properly shielded and grounded cables and connectors (IBM part number 55H8694 or its equivalent for the data/fax/voice modem, or IBM part number 72H4447 or equivalent for the data/fax modem) must be used in order to meet the FCC emissions limits. IBM is not responsible for any radio or television interference caused by using other than recommended cables and connectors or by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications to this equipment may cause interference which could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Industry Canada Class A Emission Compliance Statement

This Class A digital apparatus complies with Canadian ICES-003.

Avis de conformité aux normes d'Industrie Canada

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

EMC Directive 89/336/EEC Statement

This product is in conformity with the protection requirements of EU Council Directive 89/336/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility. IBM cannot accept responsibility for any failure to satisfy the protection requirements resulting from a non-recommended modification of the product, including fitting of non-IBM option cards.

Properly shielded and grounded cables and connectors (IBM part number 72H4447 or equivalent for the data/fax modem) must be used in order to reduce the potential for causing interference to radio and TV communications and to other electrical or electronic equipment. IBM cannot accept responsibility for any interference caused by using other than recommended cables and connectors.

Warning:

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Zulassungsbescheinigung laut dem Deutschen Gesetz über die elektromagnetische Verträglichkeit von Geräten (EMVG) vom 30. August 1995 (bzw. der EMC EG Richtlinie 89/336).

Dieses Gerät ist berechtigt in Übereinstimmung mit dem Deutschen EMVG das EG-Konformitätszeichen - CE - zu führen.

Verantwortlich für die Konformitätserklärung nach Paragraph 5 des EMVG ist die IBM Deutschland Informationssysteme GmbH, 70548 Stuttgart.

Informationen in Hinsicht EMVG Paragraph 3 Abs. (2) 2:

Das Gerät erfüllt die Schutzanforderungen nach EN 50082-1 und EN 55022 Klasse A.
--

EN 55022 Klasse A Geräte müssen mit folgendem Warnhinweis versehen werden: "Warnung: dies ist eine Einrichtung der Klasse A. Diese Einrichtung kann im Wohnbereich Funkstörungen verursachen; in diesem Fall kann vom Betreiber verlangt werden, angemessene Maßnahmen durchzuführen und dafür aufzukommen."

EN 50082-1 Hinweis:

"Wird dieses Gerät in einer industriellen Umgebung betrieben (wie in EN 50082-2 festgelegt), dann kann es dabei eventuell gestört werden. In solch einem Fall ist der Abstand bzw. die Abschirmung zu der industriellen Störquelle zu vergrößern."

Anmerkung:

Um die Einhaltung des EMVG sicherzustellen sind die Geräte, wie in den IBM Handbüchern angegeben, zu installieren und zu betreiben.

Japanese Voluntary Control Council for Interference (VCCI) Statement

This is a Class A product based on the standard of the Voluntary Control Council for Interference by Information Technology Equipment (VCCI). If this equipment is used in a domestic environment, radio disturbance may arise. When such trouble occurs, the user may be required to take corrective actions.

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Korean Communications Statement

Please note that this device has been certified for business purpose with regard to electromagnetic interference. If you find this is not suitable for your use, you may exchange it for one of residential use.

CISPR22 Compliance Statement

This product has been tested and found to comply with the limits for Class A Information Technology Equipment according to CISPR22 / European Standard EN 55022. The limits for Class A equipment were derived for commercial and industrial environments to provide reasonable protection against interference with licensed communication equipment.

Warning: This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Taiwanese Class A Warning Statement

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Appendix C. Safety Information

Safety Pointers



Danger: Before you begin to install this product, read the safety information in *Caution: Safety Information—Read This First*, SD21-0030. This booklet describes safe procedures for cabling and plugging in electrical equipment.



Gevaar: Voordat u begint met de installatie van dit produkt, moet u eerst de veiligheidsinstructies lezen in de brochure *PAS OP! Veiligheidsinstructies—Lees dit eerst*, SD21-0030. Hierin wordt beschreven hoe u elektrische apparatuur op een veilige manier moet bekabelen en aansluiten.



Danger: Avant de procéder à l'installation de ce produit, lisez d'abord les consignes de sécurité dans la brochure *ATTENTION: Consignes de sécurité—A lire au préalable*, SD21-0030. Cette brochure décrit les procédures pour câbler et connecter les appareils électriques en toute sécurité.



Perigo: Antes de começar a instalar este produto, leia as informações de segurança contidas em *Cuidado: Informações Sobre Segurança—Leia Isto Primeiro*, SD21-0030. Esse folheto descreve procedimentos de segurança para a instalação de cabos e conexões em equipamentos elétricos.



危險：安裝本產品之前，請先閱讀
"Caution: Safety Information—Read
This First" SD21-0030 手冊中所提
供的安全注意事項。這本手冊將會說明
使用電器設備的纜線及電源的安全程序。



Opasnost: Prije nego što počnete sa instalacijom produkta, pročitajte naputak o pravilima o sigurnom rukovanju u
Upozorenje: Pravila o sigurnom rukovanju - Prvo pročitaj ovo, SD21-0030. Ovaj privitak opisuje sigurnosne postupke za priključivanje kabela i priključivanje na električno napajanje.



Upozornění: než zahájíte instalaci tohoto produktu, přečtěte si nejprve bezpečnostní informace v pokynech „Bezpečnostní informace“ č. 21-0030. Tato brožurka popisuje bezpečnostní opatření pro kabeláž a zapojení elektrického zařízení.



Fare! Før du installerer dette produkt, skal du læse sikkerhedsforskrifterne i *NB: Sikkerhedsforskrifter—Læs dette først* SD21-0030. Vejledningen beskriver den fremgangsmåde, du skal bruge ved tilslutning af kabler og udstyr.



Gevaar Voordat u begint met het installeren van dit produkt, dient u eerst de veiligheidsrichtlijnen te lezen die zijn vermeld in de publikatie *Caution: Safety Information - Read This First*, SD21-0030. In dit boekje vindt u veilige procedures voor het aansluiten van elektrische apparatuur.



VAARA: Ennen kuin aloitat tämän tuotteen asennuksen, lue julkaisussa *Varoitus: Turvaohjeet—Lue tämä ensin*, SD21-0030, olevat turvaohjeet. Tässä kirjasessa on ohjeet siitä, miten sähkölaitteet kaapeloidaan ja kytketään turvallisesti.



Danger : Avant d'installer le présent produit, consultez le livret *Attention : Informations pour la sécurité — Lisez-moi d'abord*, SD21-0030, qui décrit les procédures à respecter pour effectuer les opérations de câblage et brancher les équipements électriques en toute sécurité.



Vorsicht: Bevor mit der Installation des Produktes begonnen wird, die Sicherheitshinweise in *Achtung: Sicherheitsinformationen—Bitte zuerst lesen*, IBM Form SD21-0030. Diese Veröffentlichung beschreibt die Sicherheitsvorkehrungen für das Verkabeln und Anschließen elektrischer Geräte.



Κίνδυνος: Πριν ξεκινήσετε την εγκατάσταση αυτού του προϊόντος, διαβάστε τις πληροφορίες ασφάλειας στο φυλλάδιο *Caution: Safety Information-Read this first*, SD21-0030. Στο φυλλάδιο αυτό περιγράφονται οι ασφαλείς διαδικασίες για την καλωδίωση των ηλεκτρικών συσκευών και τη σύνδεσή τους στην πρίζα.



Vigyázat: Mielőtt megkezdi a berendezés üzembe helyezését, olvassa el a *Caution: Safety Information—Read This First*, SD21-0030 könyvecskében leírt biztonsági információkat. Ez a könyv leírja, milyen biztonsági intézkedéseket kell megtenni az elektromos berendezés huzalozásakor illetve csatlakoztatásakor.



Pericolo: prima di iniziare l'installazione di questo prodotto, leggere le informazioni relative alla sicurezza riportate nell'opuscolo *Attenzione: Informazioni di sicurezza — Prime informazioni da leggere* in cui sono descritte le procedure per il cablaggio ed il collegamento di apparecchiature elettriche.



危険： 導入作業を開始する前に、安全に関する小冊子SD21-0030 の「最初にお読みください」(Read This First)の項をお読みください。
この小冊子は、電気機器の安全な配線と接続の手順について説明しています。



위험: 이 제품을 설치하기 전에 반드시 "주의: 안전 정보-시작하기 전에" (SD21-0030) 에 있는 안전 정보를 읽으십시오.



ОПАСНОСТ

Пред да почнете да го инсталирате овој продукт, прочитајте ја информацијата за безбедност:
"Предупредување: Информација за безбедност: Прочитајте го прво ова", SD21-0030.
Оваа брошура опишува безбедносни процедури за каблирање и вклучување на електрична опрема.



Fare: Før du begynner å installere dette produktet, må du lese sikkerhetsinformasjonen i *Advarsel: Sikkerhetsinformasjon — Les dette først*, SD21-0030 som beskriver sikkerhetsrutinene for kabling og tilkobling av elektrisk utstyr.



Uwaga:
Przed rozpoczęciem instalacji produktu należy zapoznać się z instrukcją: "Caution: Safety Information - Read This First", SD21-0030.
Zawiera ona warunki bezpieczeństwa przy podłączeniu do sieci elektrycznej i eksploatacji.



Perigo: Antes de iniciar a instalação deste produto, leia as informações de segurança *Cuidado: Informações de Segurança — Leia Primeiro*, SD21-0030. Este documento descreve como efectuar, de um modo seguro, as ligações eléctricas dos equipamentos.



ОСТОРОЖНО: Прежде чем инсталлировать этот продукт, прочтите Инструкцию по технике безопасности в документе "Внимание: Инструкция по технике безопасности -- Прочсть в первую очередь", SD21-0030. В этой брошюре описаны безопасные способы каблирования и подключения электрического оборудования.



Nebezpečenstvo: Pred inštaláciou výrobku si prečítajte bezpečnosté predpisy v

Výstraha: Bezpečnosté predpisy - Prečítaj ako prvý, SD21-0030. V tejto brožúrke sú opísané bezpečnosté postupy pre pripojenie elektrických zariadení.



Pozor: Preden začnete z instalacijo tega produkta preberite poglavje: "Opozorilo: Informacije o varnem rokovanju-preberi pred uporabo," SD21-0030. To poglavje opisuje pravilne postopke za kabliranje.



Peligro: Antes de empezar a instalar este producto, lea la información de seguridad en *Atención: Información de Seguridad — Lea Esto Primero*, SD21-0030. Este documento describe los procedimientos de seguridad para cablear y enchufar equipos eléctricos.



Varning — livsfara: Innan du börjar installera den här produkten bör du läsa säkerhetsinformationen i dokumentet *Varning: Säkerhetsföreskrifter— Läs detta först*, SD21-0030. Där beskrivs hur du på ett säkert sätt ansluter elektrisk utrustning.



危險：

開始安裝此產品之前，請先閱讀安全資訊。

注意：

請先閱讀 - 安全資訊 SD21-0030

此冊子說明插接電器設備之電纜線的安全程序。

Power Disconnect



Danger: The main power disconnect for this unit is the appliance inlet located on the back of the machine. Therefore, the machine should be installed in such a way that the appliance inlet can be accessed.



خطر:

يتم فصل الطاقة عن هذه الماكينة بواسطة مدخل الطاقة الموجود في الخلف. لذلك، يجب وضع هذه الماكينة بطريقة تمكنك من الوصول الي مدخل الطاقة.



Gevaar: De stroom van deze eenheid kan alleen worden uitgeschakeld via de aansluiting op de achterkant van de machine. U dient de machine daarom zodanig op te stellen dat de aansluiting op de achterkant goed toegankelijk is.



Perigo: O desligamento da energia principal desta unidade é efetuado através do dispositivo de entrada, localizado na parte posterior da máquina. Portanto, a máquina deve ser instalada de tal modo que o dispositivo de entrada possa ser acessado.



危險:

切断本单元主要电源的设备入口位于机器后面。因此，机器的安装应便于接触设备入口。



Opasnost:

Kod ovog uređaja je glavna mrežna sloпка ugrađena na stražnjem dijelu. Shodno tome, uređaj treba montirati tako da je pristup do stražnjeg dijela uvijek moguć!



Nebezpečí: Pro odpojení napájení slouží síťový přívod v zadní části zařízení, které musí být proto instalováno tak, aby byl přívod přístupný. Síťová zásuvka musí být umístěna v blízkosti zařízení a musí být dobře přístupná.



Fare! Netledningen, der sluttes til bag på maskinen, fungerer som hovedafbryder. Maskinen skal derfor installeres sådan, at der er fri adgang til netledningen.



Vaara:

Tämän yksikön päävirta katkaistaan irrottamalla koneen takaosassa sijaitseva verkkojohto. Tämän vuoksi kone tulee asentaa siten, että verkkojohdon luo on esteetön pääsy.



DANGER. Le dispositif permettant de couper l'alimentation principale de cette unité se situe à l'arrière de la machine. Ce dispositif doit donc être accessible.



Vorsicht: Der Hauptschalter zur Unterbrechung der Stromversorgung für diese Einheit ist der Schalter, der sich auf der Rückseite der Maschine befindet. Die Maschine sollte daher so aufgestellt werden, daß dieser Schalter jederzeit zugänglich ist.



Κίνδυνος: Η αποσύνδεση της παροχής ρεύματος στη συσκευή γίνεται από την υποδοχή που βρίσκεται στο πίσω μέρος της μηχανής. Επομένως, η μηχανή πρέπει να εγκατασταθεί με τρόπο που να επιτρέπει την πρόσβαση στην υποδοχή αυτή.



Figyelem! A berendezés főkapcsolójának nyílása a hátoldalon található. A telepítést úgy kell elvégezni, hogy a főkapcsoló a későbbiekben is hozzáférhető legyen.



Pericolo: Per scollegare questa unità, occorre staccare la spina posta sul retro della macchina; pertanto la macchina deve essere installata in modo tale che tale spina sia accessibile.



危険：

この装置の非常時の電源の切断は機械の背面にある電源入力コネクタで行います。従って、装置を設置する場合はこのコネクタへのアクセスに障害のないようにしてください。



위험:

본체의 주 전원 차단을 위한 장치 삽입구가 뒷면에 있으므로 장치 삽입구를 쉽게 접근할 수 있도록 설치하여야 합니다.



Опасност:

Главното одвојување на електричното напојување за оваа единица е преку приклучокот од апаратот лоциран на задната страна од машината. Затоа, машината треба да биде инсталирана на таков начин за да може приклучокот од апаратот да биде пристапен.



Fare: Denne enheten frakobles hovednettet via apparatintaket på baksiden av maskinen. Derfor må maskinen installeres slik at apparatintaket er lett tilgjengelig.



Niebezpieczeństwo:

Główny wyłącznik sieciowy tej jednostki umieszczony jest we wnętrzu z tyłu urządzenia. Urządzenie powinno być ustawione w ten sposób, aby wyłącznik był łatwo dostępny.



Perigo: Para desligar a alimentação principal desta unidade é necessário desconectar o cabo da tomada eléctrica localizada na parte posterior da máquina. Por consequência, a máquina deve ser instalada de modo a permitir o fácil acesso a essa tomada.



ОПАСНО: Разъем для отключения питания данного блока расположен на задней стенке. Поэтому устанавливайте машину так, чтобы разъем питания был доступен.



Nebezpečnostvo

Hlavný prívod pre elektrinu sa nachádza na zadnej strane stroja. Z tohto dôvodu by mal byť stroj umiestnený tak, aby mohol byť tento prívod ľahko dostupný.



Nevarnost:

Kot glavni odklop napetosti za to enoto rabi vtičnica na zadnji strani stroja. Zato je treba stroj namestiti tako, da bo zagotovljen dostop do vtičnice.



Peligro: El interruptor principal de desconexión de esta unidad es la entrada de conexión del aparato situado en la parte trasera de la máquina. Por lo tanto, la máquina debe instalarse de modo que la entrada de conexión del aparato sea accesible.



FARA: Brytning av huvudströmmen till den här enheten görs vid elanslutningen på baksidan av maskinen. Placera därför maskinen så att elanslutningen är lättåtkomlig.



危險：本機器的主電源插頭在機器背面。安裝本機器時，請預留空間以方便連接或切斷電源。

Battery Replacement



Caution: Danger of explosion if battery is incorrectly replaced.

Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.



WAARSCHUWING: Explosiegevaar als de batterij door een verkeerde batterij wordt vervangen.

Vervang alleen door hetzelfde of gelijkwaardige type dat door de fabrikant is aanbevolen. Volg voor het wegdoen van gebruikte batterijen de instructies van de fabrikant.



CUIDADO: Perigo de explosão, se a bateria for substituída incorretamente.

Substitua apenas por uma bateria igual ou equivalente, recomendada pelo fabricante. Descarte as baterias usadas de acordo com as instruções do fabricante.



注意

如果不正确地更换电池，它将会有爆炸的危险。

仅可用制造商推荐的同一种或相同类型的电池进行更换。
按制造商的指示来销毁使用过的电池。



注意

更換電池不當時，會有爆炸的危險。

請更換相同的電池或製造商所建議的型號相當。
請依製造商的指示回收廢棄的電池。



UPOZORENJE

Ako se kod zamjene baterija nepravilno uloži, postoji opasnost od eksplozije.

**Zamijenite samo s istim tipom ili istovrsnim dijelom kojeg preporuča proizvođač.
Uklonite istrošene akumulatore prema uputama proizvođača.**



POZOR

Nebezpečí výbuchu při nesprávné výměně baterie.

Zaměňte pouze stejným nebo ekvivalentním dílem, doporučeným výrobcem.
Použité baterie zlikvidujte v souladu s instrukcemi výrobce.



Pas på! Batteriet kan eksplodere, hvis det ikke udskiftes korrekt.

Udskift batteriet med et batteri af samme eller tilsvarende type, som forhandleren anbefaler. Brugte batterier skal kasseres i overensstemmelse med gældende miljøbestemmelser.



WAARSCHUWING: Explosiegevaar als de batterij door een verkeerde batterij wordt vervangen.

Vervang alleen door hetzelfde of gelijkwaardige type dat door de fabrikant is aanbevolen. Volg voor het wegdoen van gebruikte batterijen de instructies van de fabrikant.



Varoitus: Paristo voi räjähtää, jos se asennetaan väärin.

Pariston saa vaihtaa vain samanlaiseen tai vastaavaan valmistajan suositteluun paristoon. Hävitä paristo ongelmajätteistä säädettyjen lakien ja viranomaisten määräysten mukaisesti.



Attention: Pour éviter tout risque d'explosion, remplacez la pile selon les instructions du fabricant qui en définit les équivalences.

Conformez-vous à la réglementation en vigueur pour le recyclage ou la mise au rebut des piles usagées.



ACHTUNG: Die Batterie kann bei unsachgemäßem Austauschen explodieren.

Nur die vom Hersteller empfohlene oder eine gleichwertige Batterie verwenden. Nach Gebrauch als Sondermüll entsorgen.



ΠΡΟΣΟΧΗ

Κίνδυνος έκρηξης αν η μπαταρία δεν αντικατασταθεί σωστά.

Αντικαταστήστε τη μόνο με μπαταρία ίδιου ή ισοδύναμου τύπου προτεινόμενη από τον κατασκευαστή.
Πετάξτε τις χρησιμοποιημένες μπαταρίες σύμφωνα με τις οδηγίες του κατασκευαστή.



FIGYELEM!

A szakszerűtlenül kicserélt telep robbanást okozhat.
Csak azonos, vagy a gyártó által ajánlott másik típusra cserélje!
Az elhasznált telepeket az erre kijelölt hulladékgyűjtőkben helyezze el..



ATTENZIONE: Pericolo di esplosione se la batteria non è sostituita correttamente. Sostituirla solo con batterie dello stesso tipo o di tipo equivalente. Le batterie usate vanno smaltite in accordo alla normativa in vigore (DPR 915/82, successive disposizioni e disposizioni locali).



危険

『バッテリーの取扱いが正しくないと爆発の危険があります』

交換は製造者の勧める同一品または同等品
だけを使ってください。
使用済みバッテリーの廃棄は製造者の説
どろりにして



주의

배터리를 올바르게 교체하지 않으면 폭발의 위험이 있습니다.

반드시 제조업체가 지정한,
같거나 비슷한 종류로 교체하십시오.
사용하신 배터리는 제조업체의
지시에 따라 폐기 처리하십시오.



ПРЕДУПРЕДУВАЊЕ

Опасност од експлозија ако батеријата е погрешно заменета.

Заменете ја само со ист или еквивалентен тип препорачан од производителот.
Ослободете се од употребените батерии според инструкциите на производителот.



ADVARSEL: Batteriet kan eksplodere hvis det ikke settes inn riktig.

Batteriet må bare erstattes med samme type batteri eller med et tilsvarende batteri som anbefales av fabrikanten. Ikke kast det brukte batteriet som vanlig avfall. Lever det til forhandleren, på en miljøstasjon eller ved et mottak for spesialavfall.



UWAGA

Nieprawidłowe włożenie baterii grozi eksplozją.

Należy wymienić tylko na baterię tego samego lub zamiennego typu zalecanego przez producenta.
Zużyte baterie należy usuwać zgodnie z instrukcjami producenta.



CUIDADO: Perigo de explosão se a bateria for incorrectamente substituída.

Substitua a bateria por outra igual ou de um tipo equivalente recomendado pelo fabricante. Destrua as baterias usadas de acordo com as instruções do fabricante.



ОСТОРОЖНО

При неправильной замене батареи возможен взрыв.

Заменяйте батарею на такую же или на батарею эквивалентного типа, рекомендованного изготовителем.
При утилизации использованных батарей следуйте инструкциям изготовителя.



VÝSTRAHA

Nebezpečie výbuchu pri nesprávnej výmene batérie.

Nahrádzajte iba za ten istý alebo equivalentný typ
podľa doporučenia výrobcu.
Použité batérie skladujte podľa
pokyno výrob



OPOZORILO

Nevarnost eksploozije, če se baterija nepravilno zamenja.

Za zamenjavo uporabite enak ali enakovreden tip
baterije, kot ga priporoča proizvajalec.
Uporabljene baterije odstranite po navodilih proizvajalca.



Precaución: Peligro de explosión si se sustituye incorrectamente la batería.

Sustituya solamente por el mismo tipo o tipo equivalente recomendado por el fabricante. Deseche las baterías usadas siguiendo las instrucciones del fabricante.



Varning: Explosionsrisk vid batteribyte.

Byt endast till samma typ av batteri eller till likvärdigt batteri som rekommenderas av tillverkaren. Följ tillverkarens instruktioner vid kassering av uttjänta batterier.

Class 1 LED Statement

Class 1 LED Product
LED Klasse 1
LED Klass 1
Luokan 1 Ledlaite
Appareil À LED de Classe 1

To IEC 825-1:1993

Class 1 Laser Statement

Class 1 Laser Product
Laser Klasse 1
Laser Klass 1
Luokan 1 Laserlaite
Appareil À Laser de Classe 1

To IEC 825-1:1993

Lithium Battery Statement

The MSS Server processor card contains a clock module that has an embedded lithium battery that is not replaceable. Please dispose of this module in accordance with local ordinances.

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Installation and Initial Configuration
Guide

Publication No. GA27-4140-03

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Easy to understand	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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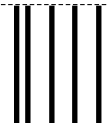


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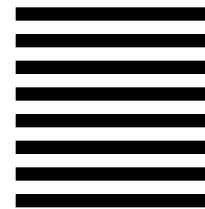
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