

8371 Networking Multilayer Ethernet Switch



Installation and Planning Guide

Includes Instructions for 8371-A16 and 8265-L3S

Note

Before using this information and the product it supports, be sure to read the safety information under "Safety Information" on page vii and the general and emissions notices in Appendix B, "Notices" on page B-1.

First Edition (March 1999)

This edition applies to the IBM 8371-A16 Networking Multiprotocol Ethernet Switch.

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Safety Information



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.



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 priručnik 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" (SD21-0030-02)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 устанавливать этот продукт, прочтите Инструкцию по технике безопасности в документе "Внимание: Инструкция по технике безопасности -- Прочестъ в первую очередь", SD21-0030. В этой брошюре описаны безопасные способы каблирования и подключения электрического оборудования.



Nebezpečenstvo: Pred inštaláciou výrobku si prečítajte bezpečnostné predpisy v
Výstraha: Bezpečnostné predpisy - Prečítaj ako prvý,
SD21 0030. V tejto brožúrke sú opísané bezpečnostné postupy pre pripojenie elektrických zariadení.



Pozor: Preden zaènete 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。

About This Manual

This manual explains how to plan for and install the 8371-A16 Networking Multiprotocol Ethernet Switch and the 8265-L3S.

Who Should Read This Manual

This manual is intended for use by installation technicians and network administrators.

How This Manual Is Organized

- Chapter 1, "Introduction" provides a functional product description.
- Chapter 2, "Network Planning" provides information about planning your network to include the 8371-A16 Networking Multiprotocol Ethernet Switch or the 8265-L3S.
- Chapter 3, "Installation" describes installation and cabling procedures.
- Chapter 4, "Problem Determination" provides problem determination procedures, how to get help from IBM, and procedures for downloading new code.
- Appendix A, "Physical Characteristics and Requirements" is a description of physical and environmental characteristics of the 8371-A16 Networking Multiprotocol Ethernet Switch and the 8265-L3S.
- Appendix B, "Notices" contains product notices and provides warranty information.

Prerequisite Publication

Caution: Safety Information—Read This First, SD21-0030.

Chapter 1. Introduction

This chapter describes the features of the 8371-A16 Networking Multiprotocol Ethernet Switch and the 8265-L3S (the blade version of the 8371) and provides a functional overview that can help you integrate the products into your new or existing network. Both products have the same function, and will be referred to as 8371 in this publication.

The 8371 is an intelligent managed switch, designed for use in medium-sized workgroups or remote locations that are part of a large network.

8371 Hardware

The 8371-A16 Networking Multiprotocol Ethernet Switch and the 8265-L3S have all the connectors and light-emitting diodes (LEDs) placed on the front, with the exception of the power cord, which is located on the back.

The 8371 has a 10BASE-T Ethernet service port.

The 8371 also has one standard serial service port: an EIA 232 male 9-pin D-shell connector. (In the 8265-L3S, the EIA 232 service port is identified as an RS-232 port.) The serial service port can be attached locally through a null modem cable or remotely through a modem attachment.

See Appendix A, "Physical Characteristics and Requirements" for a description of physical and environmental characteristics of the 8371 and pin assignments for the EIA 232 service port.

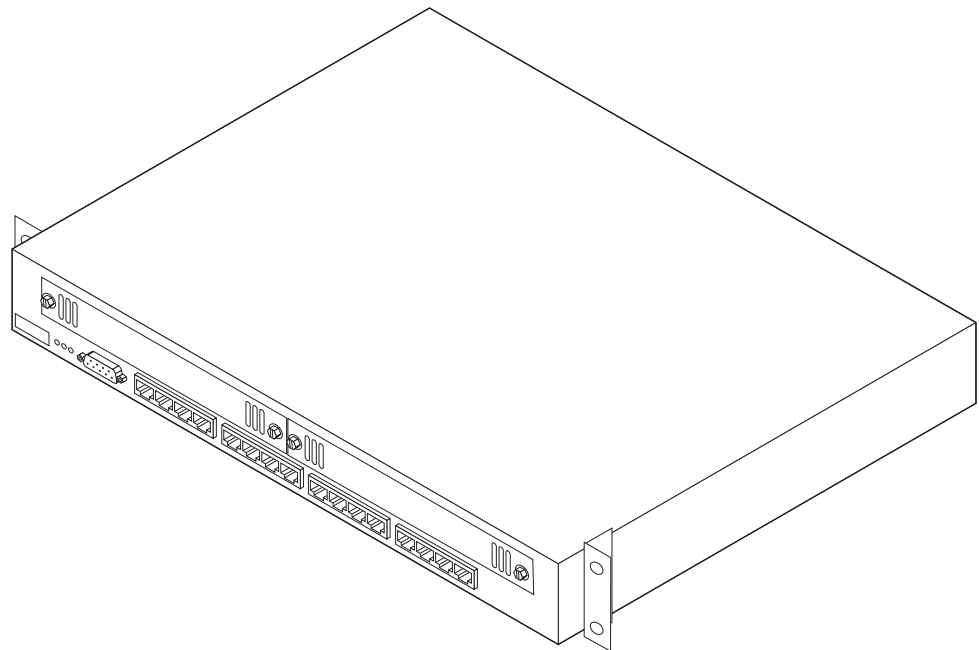


Figure 1-1. 8371-A16 Networking Multiprotocol Ethernet Switch

Product Features

The 8371 contains the following features:

- An RS-232 port on the front of the 8371 that allows you to monitor and manage the 8371 and its ports. You can use the panel to set device-level configuration values.
- A command line interface that allows you to issue management commands and retrieve data. You can access this interface by a terminal attached to the RS-232 port or an Ethernet port.
- SNMP Network Management — The ability to act as an SNMP agent allowing the switch to be managed by a wide range of SNMP management programs such as Nways Workgroup Manager for Windows NT V1.1.3 and Nways Manager for AIX V1.2.3 - Campus Manager LAN.
- Web-Based Management — The ability to use an Internet browser to manage the 8371 remotely.
- Switch Security — The ability to use a password to prevent unauthorized personnel from changing switch configuration settings.
- Virtual LANs (VLANs) — The ability to limit the proliferation of broadcast and multicast frames that are normally forwarded over all active bridge ports. The bridged network can thus be dynamically partitioned into protocol-specific subnetworks.
- Software updates — The ability to download software upgrades to the 8371 by using TFTP.

Functional Characteristics

Figure 1-2 shows the indicators, ports, and keys on the front panel of the 8371.

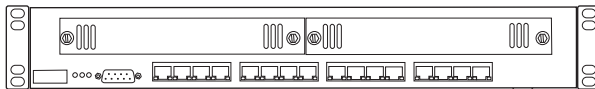


Figure 1-2. Front Panel

Figure 1-3 shows the rear panel of the 8371.



Figure 1-3. Rear Panel

Communication Ports

The following types of ports are available on the 8371.

- Base Ports
 - 10/100BASE-TX (8371-A16, 8265 Feature Code 6616)
 - 100BASE-FX (8265 Feature Code 6617)

The last 8 digits of the base MAC Address of the 8371 are printed on a label on the front of the 8371. The first 4 digits of the base MAC Address are not on the label. You can get the numbers through a console session.

- Expansion Ports
 - 10/100BASE-TX (8265 Feature Code 6626)
 - 100BASE-FX (8265 Feature Code 6627)
 - OC-3 ATM (not supported in the 8265-L3S) Limit one permitted in an 8371.

The last 8 digits of the base MAC Address of the 8371 are printed on a label on the front of the 8371. The first 4 digits of the base MAC Address are not on the label. You can get the numbers through a console session.

The Management Port

The management port is an EIA 232 port that is used to configure the 8371 using an ASCII terminal.

Cables and Connectors

Cable and connector requirements differ depending on the port to which each cable connects.

Maximum Cable Lengths

Table 1-1 lists the maximum recommended cable lengths.

Table 1-1. Recommended Maximum Cable Lengths

| Ethernet Type | Maximum Segment Length |
|------------------------|---|
| 10BASE-T 100BASE-TX | 100 m (328 ft) |
| 100BASE-FX | 412 m (1352 ft) for half-duplex 2000 m (6562 ft) for full-duplex |

Base Ports Cabling

- TX

This module uses 16 RJ-45 connectors. For connection to 10BASE-T networks, you should use UTP/STP category 3, 4, or 5 cables. For connection to 100BASE-TX networks, you can use only category 5 cables. STP requires a user-provided 100-ohm/150-ohm balun.

- FX

This expansion module uses 16 MT-RJ-type connectors. Use multimode optical fiber that meets the specifications in TIA/EIA 568A or ISO/IEC 11801. The maximum length of optical fiber cable between devices should not exceed 2000 m (6562 ft) if the link is used in full-duplex mode. If the link is used in half-duplex mode, the length should not exceed 412 m (1352 ft).

Cabling Requirements for the 8-Port 10/100BASE-TX Feature Module

This module uses 8 RJ-45 connectors. For connection to 10BASE-T networks, you should use UTP/STP category 3, 4, or 5 cables. For connection to 100BASE-TX networks, you can use only category 5 cables. STP requires a user-provided 100-ohm/150-ohm balun.

Cabling Requirements for the 8-Port 100BASE-FX Feature Module

This expansion module uses 8 MT-RJ-type connectors. Use multimode optical fiber that meets the specifications in TIA/EIA 568A or ISO/IEC 11801. The maximum length of optical fiber cable between devices should not exceed 2000 m (6562 ft) if the link is used in full-duplex mode. If the link is used in half-duplex mode, the length should not exceed 412 m (1352 ft).

Cabling Requirements for the 2-Port ATM155 Feature Module

This module uses 2 SC-type connectors. For connection to 155Mbps ATM networks, use 62.5-micron, plenum-rated, multimode optical fiber.

Cabling Requirements for the Management Port

The management port is a standard DB-9 male connector that provides an EIA/TIA 232 serial interface. You can connect using a null-modem cable to a local workstation or a standard serial cable to a modem for a remote connection. Once connected you can manage the 8371. This is called *out-of-band management*.

Note: You can make a null-modem cable by connecting a null-modem adapter to a standard serial cable.

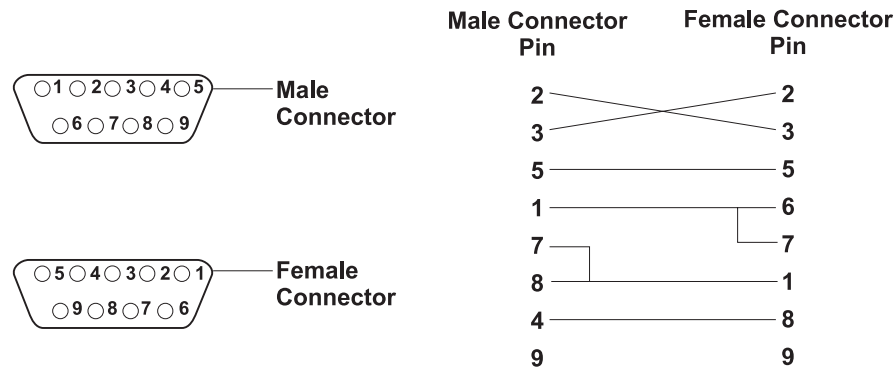


Figure 1-4. Null Modem Cable Pin Assignments

Chapter 2. Network Planning

Figure 2-1 shows a typical Ethernet network arrangement, including an 8371-A16 Networking Multiprotocol Ethernet Switch.

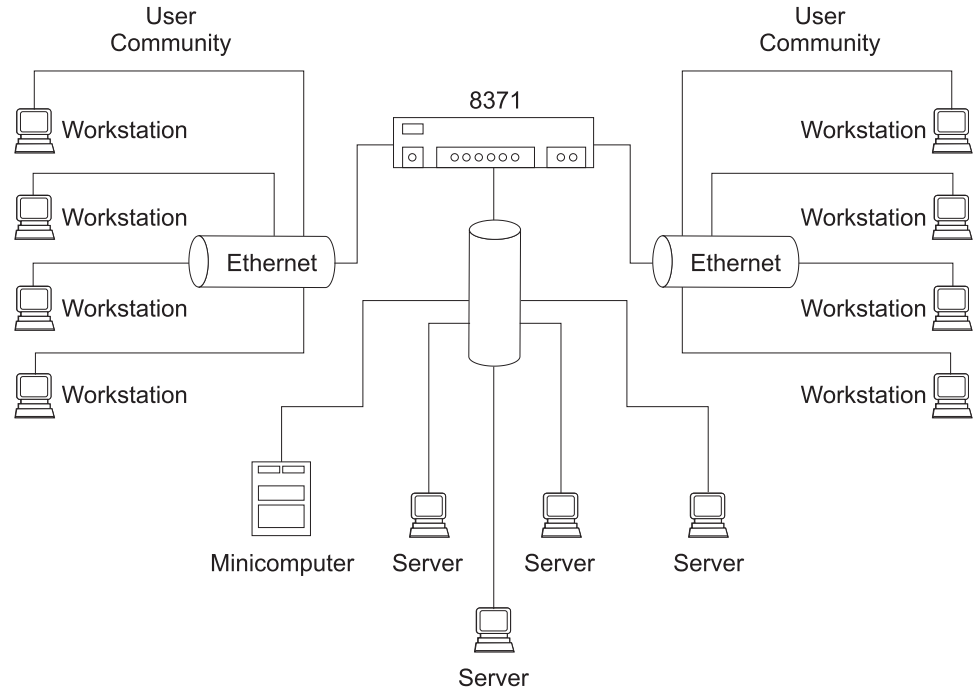


Figure 2-1. Ethernet network using 8371

Chapter 3. Installation

Before installing the 8371, be sure to read “Safety Information” on page vii and the notices and warranty information in Appendix B, “Notices” on page B-1.

This chapter provides step-by-step instructions for installing the 8371.

Installation Summary

Table 3-1. Ethernet Desktop Installation Procedures

| Step | Procedure | Reference |
|------|-----------------------------|---|
| 1. | Read the safety booklet. | SD21-0030 |
| 2. | Unpack the 8371 | “Unpacking Instructions” on page 3-1 |
| 3. | Rack-mount the 8371 | “Rack-Mounting the 8371” on page 3-1 |
| 4. | Install an Optional Module | “Installing a Feature Module” on page 3-2 |
| 5. | Perform power-on checkout | “Power-On Checkout” on page 3-4 |
| 6. | Connect the Cables | “Cabling” on page 3-4 |
| 7. | Plan and configure the 8371 | Chapter 2, “Network Planning” on page 2-1 |

Unpacking Instructions

- Step 1** Verify that the items listed here are in the package. The package should contain:
- A CD-ROM
 - An 8371-A16 Networking Multiprotocol Ethernet Switch or 8265-L3S
 - A rack-mounting kit (not included with blade)
 - *Operations Reference* card
 - A card tray to hold the Reference card (not included with blade)
 - Safety Manual

- Step 2** Visually inspect the unit to ensure that it was not damaged during shipping. If any items are missing or damaged, contact your place of purchase.

Rack-Mounting the 8371

The 8371 can be installed on a flat level surface or it can be installed in a standard 19-inch rack. To install the 8371 in a rack, refer to Figure 3-1 on page 3-2 and perform the following steps.

- Step 1** Install the two mounting brackets to the sides of the 8371 using the brackets and screws provided.

- Step 2** Insert the switch into a 19-inch rack.

Note: The rack-mounting screws are *not* provided. Ensure that the ventilation holes are not obstructed.

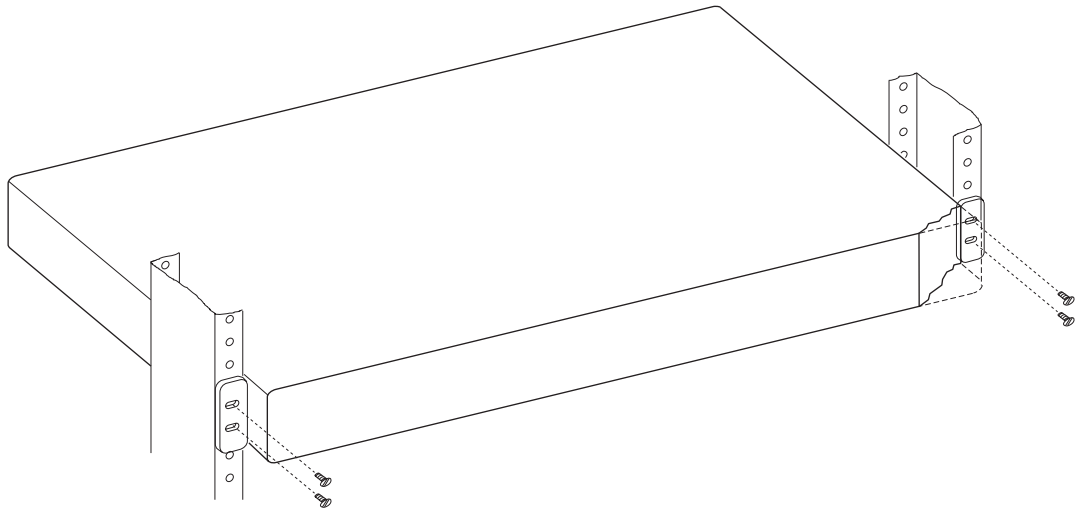


Figure 3-1. Rack-Mounting the 8371

Installing a Feature Module

Important: 8371 feature modules are hot-swappable and can be inserted and removed from the 8371 without disconnecting the power.

Three feature modules are available for the 8371: 2-Port ATM155, 8-Port 100BASE-FX, and 8-Port 10/100BASE-TX.

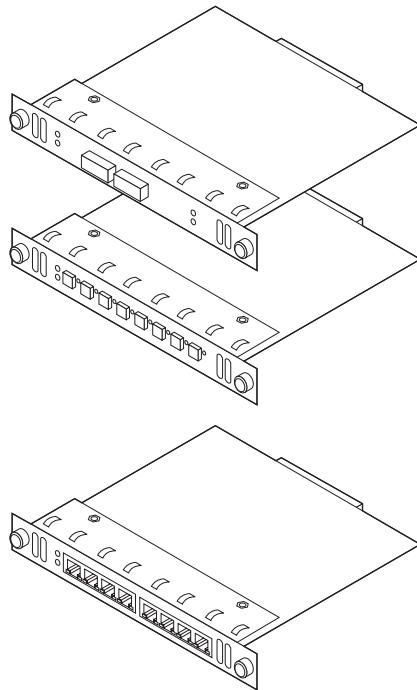


Figure 3-2. The Feature Modules

To install these modules, perform the following steps:

- Step 1** Remove the cables from the feature module. You might want to label each cable as you disconnect it for ease of reconnection.
- Step 2** If you are installing a feature module in an unused slot, remove the screws on the blank cover with a screwdriver.
- Step 3** Remove the cover or existing feature module from the 8371.

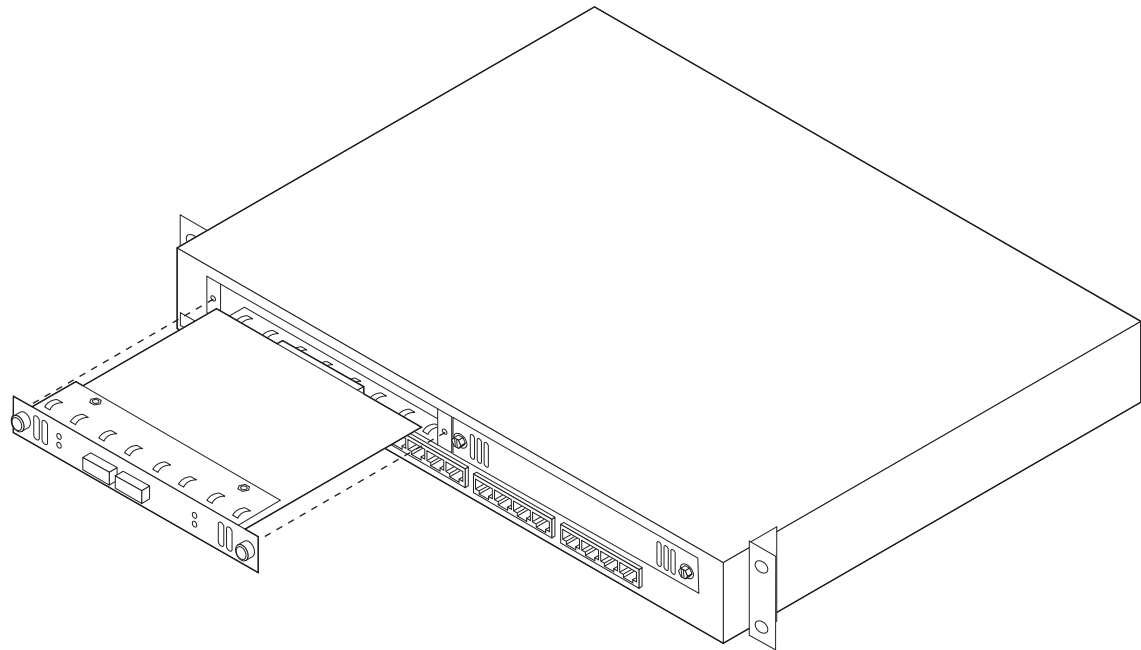


Figure 3-3. Installing a Feature Module

- Step 4** Slide the new card along the grooves in the slot and secure the two thumbscrews.
- Step 5** Reattach the cables to the system card.
- Step 6** Verify the LEDs. See Table 4-2 on page 4-6 and Table 4-3 on page 4-6.
Additionally, the System Card Status green LED should be on and the System Card Status Yellow LED should be Off. If the LEDs are not in the correct state, call your service representative.
- Step 7** Notify the network administrator that you have finished adjusting the 8371.

For information about attaching cables to the newly installed feature module, see “Cabling” on page 3-4.

Removing a Feature Module

- Step 1** Remove the installed feature module, or blank cover, by turning the two screws on the front counterclockwise.
- Step 2** Reinstall the blank cover or a new module.

Power-On Checkout

Connect the AC power cable from the back panel to the power source. This powers on the 8371.

At power on, the power, fault, and OK LEDs should be lit. The fault LED will turn off within several seconds. The OK LED should start to blink, then turn on solid once the 8371 is operational. For more information about the LEDs, see “8371 LED Indicators” on page 4-1.

Cabling

Cable Tips

- Avoid stretching or bending cables.
- Avoid routing cables near potential sources of electromagnetic interference, such as motorized devices or fluorescent lights.
- Route cables away from aisles and walkways to avoid creating trip hazards. Use floor cable covers to secure cables if such routes cannot be avoided.

Attaching Cables to Ports

- 1** Refer to your network documentation to determine each cable's port or optional slot assignment.
- 2** Using appropriate connectors, connect the cables to the ports or optional slots.
- 3** Route cables through a cable bracket at the side of the 8371, if needed.
- 4** Label each end of the cables so that it is easy to identify the device at the other end of the cable. At the end of the cable nearest the switch, place a label containing a unique identifier for the cable, the location and MAC address of the device at the other end of the cable, and the number of the port to which the device is attached.
- 5** If required, at the attached device's end of each cable, connect a cable from the device to any faceplate or other intermediate connection point, as appropriate.
- 6** At the end of the cable nearest the attached device, place a label containing a unique identifier for the cable, the location, and MAC address of the 8371 at the other end of the cable, and the number of the 8371 port to which the device is attached.

Connecting to the EIA/TIA-232 Service Port

You can connect the management port directly to a local workstation by using a null-modem cable, or you can use a serial cable and a modem to connect to a remote workstation.

Using a Local Workstation: To access the 8371 locally, perform the following steps.

1. Connect one end of a null-modem cable to the 8371 management port labeled EIA 232.
2. Connect the other end of the cable to the communications port on your workstation.

Using a Remote Workstation: To access the 8371 remotely, perform the following steps.

1. Connect one end of a serial cable to the 8371 management port labeled EIA 232.
2. Connect the other end of the cable to your modem.
3. Make sure that the modem is in auto-answer mode.

For information on setting up a session through the management port, see *8371 Networking Multilayer Ethernet Switch Software User's Guide and Configuration Reference*.

Connecting to the 10BASE-TX Service Port

1. Connect one end of an RJ-45 cable to the 8371 service port.
2. Connect the other end of the cable to the Ethernet network.

Installing the 8265-L3S in the 8265

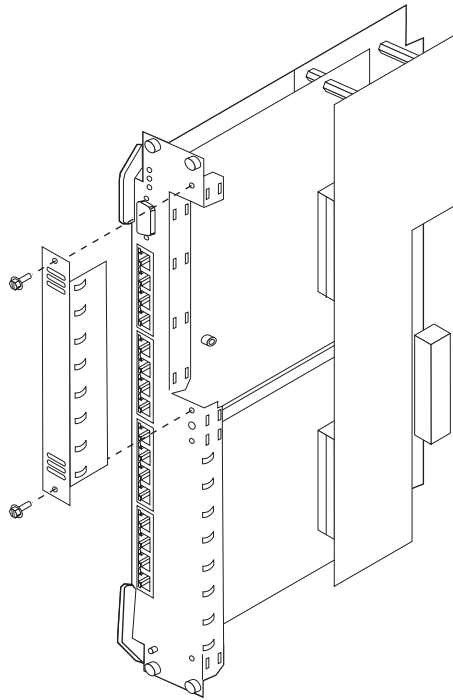


Figure 3-4. Removing the Faceplate

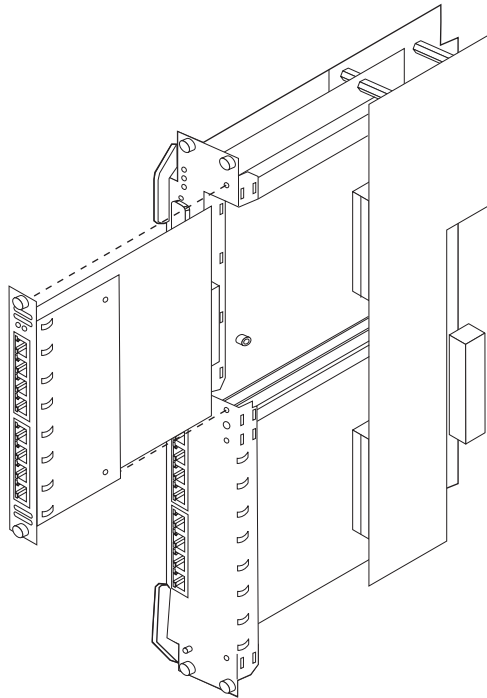


Figure 3-5. Installing a Blade

Installing the module does not require you to power down the 8265; you can hot-swap the module.

Grasp the module by the top and bottom of the faceplate. Carefully insert the module into its slot and guide it straight while pressing evenly and firmly to correctly seat the module connectors into the hub backplane.

When it is completely seated, close the latches and tighten the thumb-screws to secure the module.

Starting a Console Session and Loading New Code Image

See 8371 Networking Multilayer Ethernet Switch Software User's Guide and Configuration Reference.

Chapter 4. Problem Determination

This chapter briefly describes methods of diagnosing hardware problems.

Troubleshooting

Both hardware and software (operational code and configuration) problems can affect the 8371. LEDs, diagnostic programs, and error messages provide information needed for problem determination. This manual is chiefly concerned with diagnosing and correcting hardware problems, but it includes some software information for your convenience.

Diagnosing Hardware Problems

Generally, errors that occur *before* the operational code is loaded are hardware-related. LEDs on the front of the 8371 are indicators of the status of hardware components within the 8371.

Go to “8371 LED Indicators” for LED status and indicators for the 8371.

See “Installing a Feature Module” on page 3-2 for information on removal and replacement procedures for optional modules.

Diagnosing Operational Code and Configuration Problems

Generally, errors that occur *after* the operational code is loaded indicate problems with the operational code or configuration file.

Error codes and corrective action are described in the *8371 Networking Multilayer Ethernet Switch Software User's Guide and Configuration Reference*.

8371 LED Indicators

Figure 4-1 shows the locations of the LEDs, and Table 4-1 on page 4-2 indicates the meaning of the LEDs.

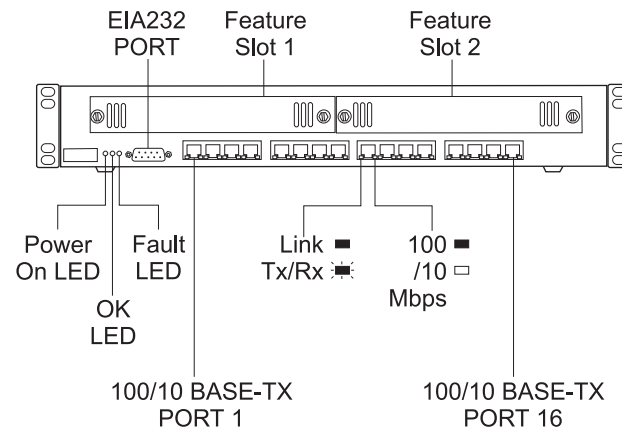


Figure 4-1. Front Panel of the 8371

Table 4-1. 8371 LEDs

| LED | Color | State | Explanation |
|-------------------------|--------|------------|---|
| I (Power On) | Green | ON | 8371-A16 There is ac power to the 8371 and the power supply is OK. 8265-L3S Blade is recognized and enabled by the 8265. |
| | | OFF | 8371-A16 No ac power is present, or there is a power supply failure. 8265-L3S No power received from the 8265. |
| OK | Green | ON | Operational code has loaded without a fault. |
| | | OFF | Operational code has not loaded or has failed. |
| | | Flickering | Operational code load is in process. |
| Fault | Yellow | ON | Indicates a hardware fault. |
| | | OFF | No hardware fault. |
| Right Ethernet Port LED | Green | ON | 100 Mbps |
| | | OFF | 10 Mbps |
| Left Ethernet Port LED | Green | ON | Link |
| | | Flickering | TxRx traffic |

Use the following chart to determine the correct course of action concerning your 8371.

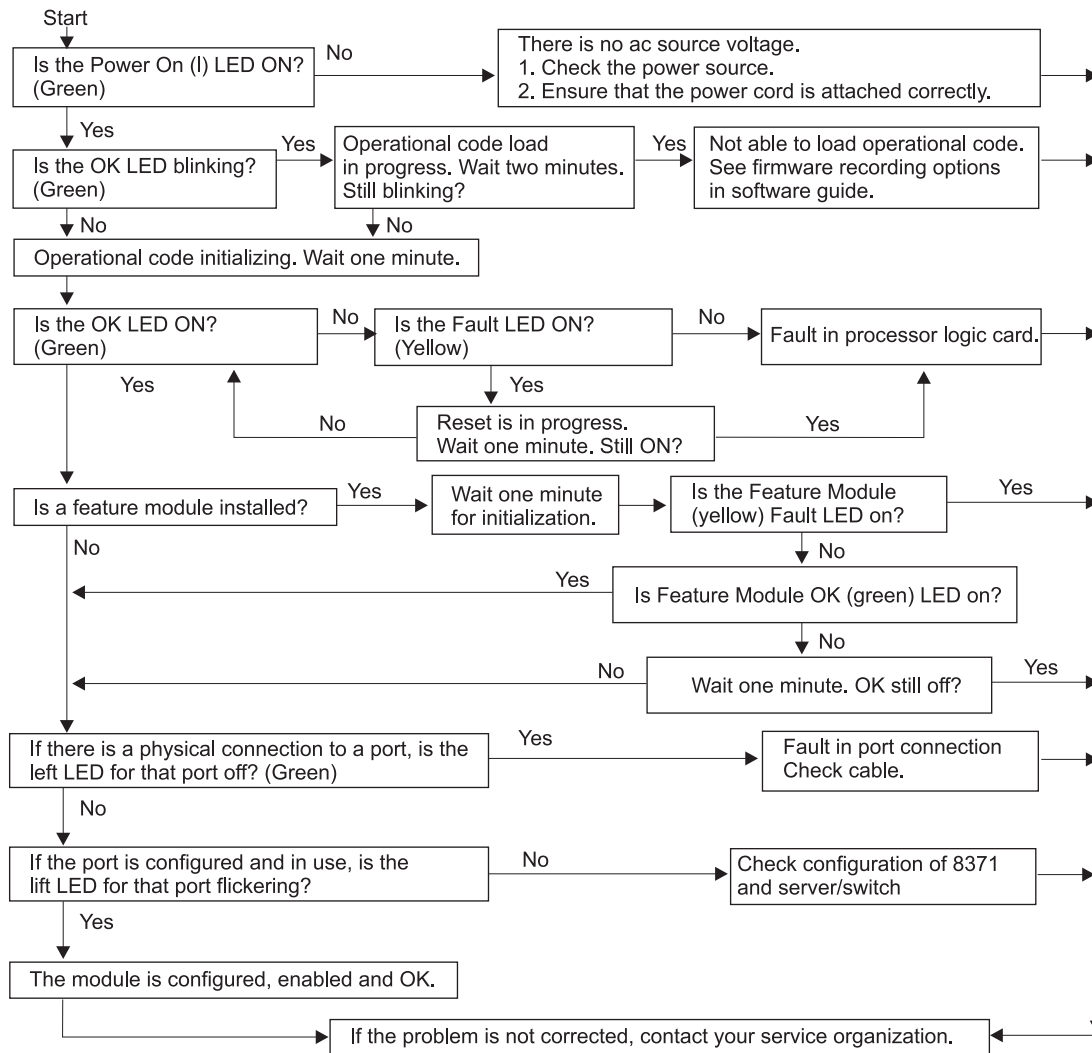


Figure 4-2. Problem Solving for the 8371

Module LED Status Indicators

This section describes the LED status indicators for the 8371 feature modules.

Generally, errors occurring **before** the operational code is loaded are hardware-related. LEDs on the front of the 8371 reflect the status of the hardware components within the 8371.

Figure 4-3, Figure 4-4 on page 4-5, and Figure 4-5 on page 4-5 show the location of the LEDs, and Table 4-2 on page 4-6 indicates the meaning of the LEDs.

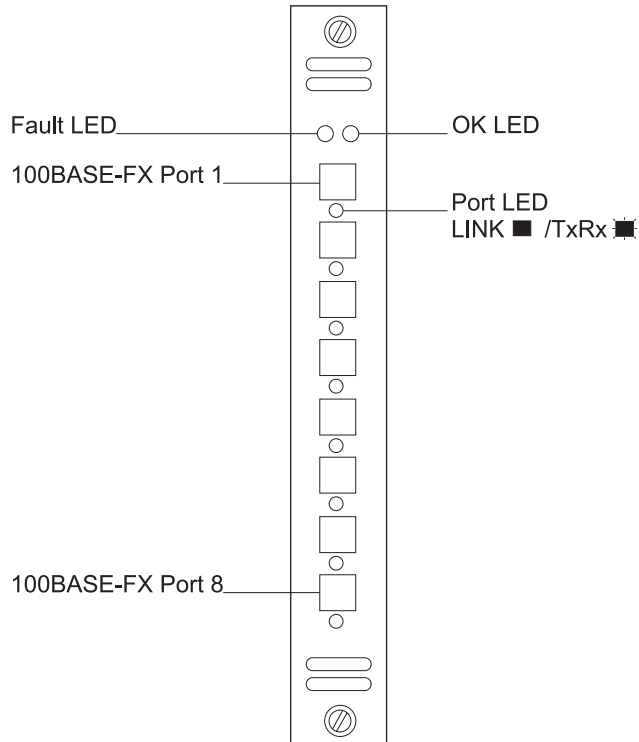


Figure 4-3. Front Panel of the FX Feature Module

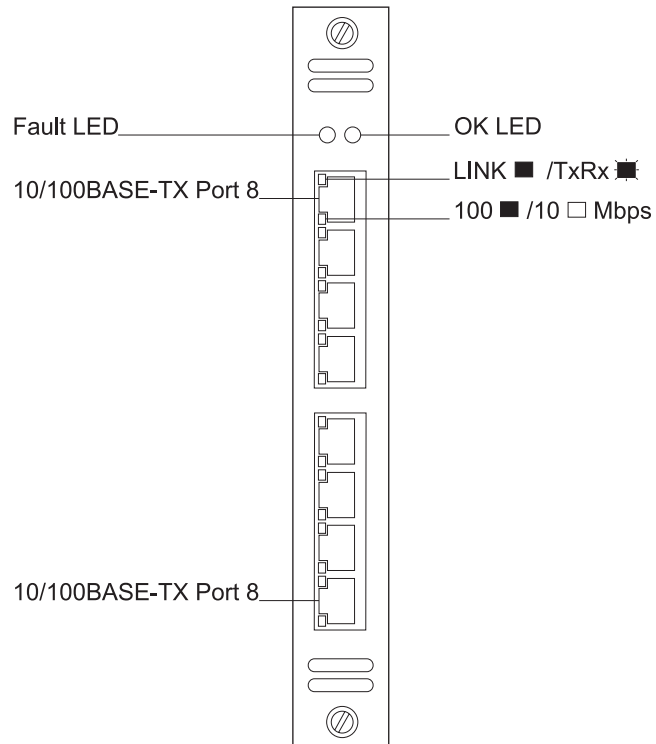


Figure 4-4. Front Panel of the TX Feature Module

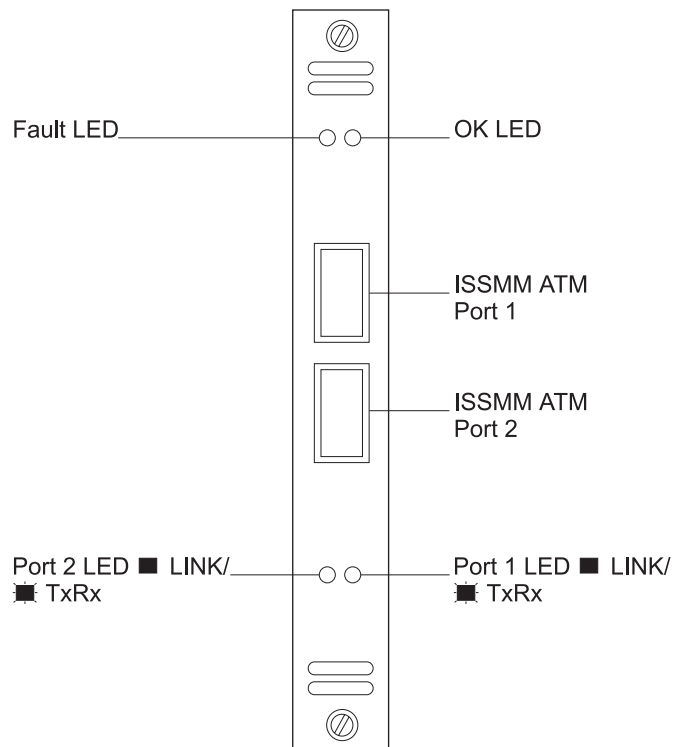


Figure 4-5. Front Panel of the ATM Feature Module

Table 4-2. 8371 10/100BASE-TX Blade LEDs

| LED | Color | State | Explanation |
|--------------------------|--------|------------|-----------------------------|
| OK | Green | ON | Module is operational. |
| | | OFF | Module is not operational. |
| Fault | Yellow | ON | Indicates a hardware fault. |
| | | OFF | No hardware fault. |
| Bottom Ethernet Port LED | Green | ON | 100 Mbps |
| | | OFF | 10 Mbps |
| Top Ethernet Port LED | Green | ON | Link |
| | | Flickering | TxRx traffic |

Table 4-3. 8371 100BASE-FX and ATM155 Blade LEDs

| LED | Color | State | Explanation |
|----------|--------|------------|-----------------------------|
| OK | Green | ON | Module is operational. |
| | | OFF | Module is not operational. |
| Fault | Yellow | ON | Indicates a hardware fault. |
| | | OFF | No hardware fault. |
| Port LED | Green | ON | Link |
| | | Flickering | TxRx traffic |

Appendix A. Physical Characteristics and Requirements

Dimensions

8371-A16 Networking Multiprotocol Ethernet Switch

Width: 439 mm (17.3 in.)

Depth: 355.6 mm (14 in.)

Height: 64 mm (2.5 in.)

8265-L3S Width: the width of two slots

Operating Clearances

8371-A16 Networking Multiprotocol Ethernet Switch

Front: Adequate space to view LEDs

Sides: 50.8 mm (2 in.)

Rear: 50.8 mm (2 in.)

8265-L3S N/A

Weight

8371-A16 Networking Multiprotocol Ethernet Switch 6.4 kg (14.19 lb)

8265-L3S 2.38 kg (5.19 lb)

Power Requirements

8371-A16 Networking Multiprotocol Ethernet Switch The internal universal power supply can accept ac voltage in the following range: 100–240 V ac, 50-60 Hz.

8265-L3S 100W

Power Dissipation

Maximum input power is 150W.

Operating Environment

Table A-1. Operating Environment - 8371-A16 Networking Multiprotocol Ethernet Switch

| | |
|-----------------------|---------------------------------|
| Operating Temperature | 10°C to 40° C (50° to 104° F) |
| Storage Temperature | 1° C to 60° C (33.8° to 140° F) |
| Operating Humidity | 8% to 80% non-condensing |

Appendix B. Notices

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|--|
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**8371 Networking Multilayer Ethernet Switch
Installation and Planning Guide
Includes Instructions for
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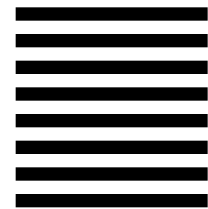
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