Bull ESCALA E Series

Hardware Tasks: Where Do I Find the Information I Need?

- ❑ Introduction
- ❑ System Setup and Features
- ❑ System Panels
- ❑ Media Devices
- ❑ Hard Disk Devices
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- ❑ CPU Cards
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Hardware Tasks: Where Do I Find the Information I Need?

Hardware

December 1997

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FRANCE

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Introduction

The goal of this booklet is to help you quickly find any required information related to the main hardware tasks, such as upgrading your system hardware or using the system devices.

This booklet is organized in macro-topics; for each macro-topic the related hardware tasks are included. For each hardware task, the sequence you need to follow until you reach the relevant information is indicated.

Most of this information is available both online and on paper. The paths here given to reach the information you are looking for must be followed either if you are using online documentation or paper books.

Here is an example, supposing you need to remove the front panel from your system.

Scroll the booklet until you find the macro-topic (**System Panels** in this example).

System Panels

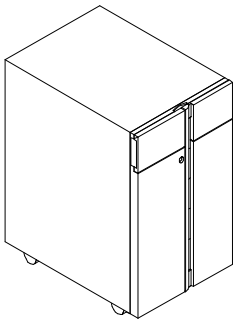
- Front Panel Removal
  Upgrading the System, **Preparing Your System for an Upgrade**, → **Preliminary and Restart Operations**, → **System Panels**, → **Front Panel Removal**

where:

- Front Panel Removal is the description of the hardware task, *Upgrading the System* is the title of the manual that you are required to consult, **Preparing Your System for an Upgrade** is the chapter, **Preliminary and Restart Operations** is the paragraph, **System Panels** is a sub-paragraph, and **Front Panel Removal** is the sub-paragraph that really contains the information you need.

Note: If you find any unknown term or concept when consulting a specific manual, have a look at the glossary placed at the end of that manual.

System Setup and Features



Base Unit

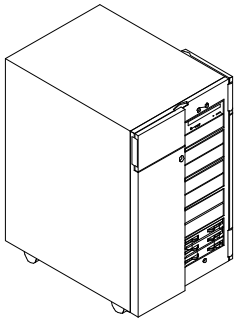
- Setup
  Setting Up the System, **System Setup Roadmap**
  and, in particular,
  Setting Up the System, **Base Unit Setup Procedure** (the whole chapter)
- Presentation and Features
  Setting Up the System, **Knowing Your New System**, → **System Features Overview**
  or
  Operator's Guide, **Description of the System**, → **System Presentation**
- Operator Panel
  Operator's Guide, **Description of the System**, → **Operator Panel**
- Keys
  Setting Up the System, **Base Unit Setup Procedure**, → **Inserting the Operator Panel Key**
  and
  Operator's Guide, **Description of the System**, → **Operator Panel**, → **Key Mode Switch**
- Power Cord
  Setting Up the System, **Base Unit Setup Procedure**, → **Connecting the Power Cord**
  and
  Setting Up the System, **What To Do When a Problem Occurs**, → **System Power**

- Starting and Stopping Procedures
  Setting Up the System, **Base Unit Setup Procedure**, → **Starting the System for the First Time**
  and
  Operator's Guide, **Maintaining the System**, → **Starting and Stopping the System**
- Maintaining Configuration Variables (Open Firmware)
  Operator's Guide, **Maintaining the System**, → **Maintaining System Configuration Variables**

Disk Expansion Unit

- Setup
  Disk Expansion Unit Quick Set Up (the whole guide)
- Presentation and Features
  Using the Disk Expansion Unit, **Disk Expansion Unit Description**, → **Knowing the Disk Expansion Unit**
- Operator Panel
  Using the Disk Expansion Unit, **Disk Expansion Unit Description**, → **Knowing the Disk Expansion Unit**, → **Disk Expansion Unit Operator Panel**
- Keys
  Using the Disk Expansion Unit, **Disk Expansion Unit Description**, → **Knowing the Disk Expansion Unit**, → **Disk Expansion Unit Operator Panel**, → **Key Mode Switch**
- Starting and Stopping (daily)
  Using the Disk Expansion Unit, **Starting and Stopping Procedures**
- Starting and Stopping (for maintenance purposes) (maintenance task)
  Disk Expansion Unit Service Guide, **Hardware Component Installation**, → **Preliminary and Restart Operations**, → **Preliminary Operations** (for stopping) and **Restart Operations** (for starting)
- Configuration
  Using the Disk Expansion Unit, **Disk Expansion Unit Configuration** (the whole chapter)

System Panels



- Device Shutter Opening
  Upgrading the System, **Preparing Your System for an Upgrade**, → **Preliminary and Restart Operations**, → **System Panels**, → **Device Shutter Opening**
- Device Shutter Closing
  Upgrading the System, **Preparing Your System for an Upgrade**, → **Preliminary and Restart Operations**, → **System Panels**, → **Device Shutter Closing**
- Front Panel Removal
  Upgrading the System, **Preparing Your System for an Upgrade**, → **Preliminary and Restart Operations**, → **System Panels**, → **Front Panel Removal**
- Front Panel Installation
  Upgrading the System, **Preparing Your System for an Upgrade**, → **Preliminary and Restart Operations**, → **System Panels**, → **Front Panel Installation**
- Lateral Panel Removal
  Upgrading the System, **Preparing Your System for an Upgrade**, → **Preliminary and Restart Operations**, → **System Panels**, → **Lateral Panel Removal**
- Lateral Panel Installation
  Upgrading the System, **Preparing Your System for an Upgrade**, → **Preliminary and Restart Operations**, → **System Panels**, → **Lateral Panel Installation**

Media Devices

General Tasks

- Description of the Device Areas
  Upgrading the System, **Devices**, → **Device Description**

  and

  Using the Disk Expansion Unit, **Disk Expansion Unit Configuration**, → **Disk Expansion Unit Configuration Description**
- Drives Configuration and SCSI-ID
  Upgrading the System, **Devices**, → **Device Configuration**

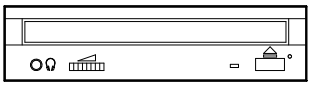
  and

  Using the Disk Expansion Unit, **Disk Expansion Unit Configuration**, → **Disk Expansion Unit Configuration Rules**
- SCSI Connections
  (maintenance task)
  Maintenance and Service Guide, **SCSI Cables Description and Connection** (the whole chapter)

  and

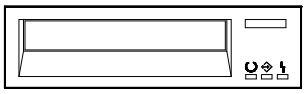
  Disk Expansion Unit Service Guide, **SCSI Cables Description and Connection** (the whole chapter)

CD-ROM



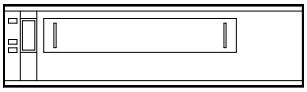
- Drive Description and Usage
  Operator's Guide, **Using Devices and Tools**, → **Using the CD-ROM Drive**
- Drive SCSI-ID
  Disks and Tapes Configuration Information, **CD-ROM Drives**, → The paragraph related to your CD-ROM drive model
- CD-ROM Preventive Maintenance
  Operator's Guide, **Using Devices and Tools**, → **Using the CD-ROM Drive**, → **Handling CD-ROMs**
- Drive Upgrading
  Upgrading the System, **Devices**, → **Device Upgrading**, → **Media Drive Upgrading**
- Drive Removal
  Upgrading the System, **Devices**, → **Device Removal**, → **Media Drive Removal**

QIC Tape



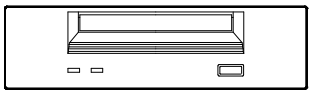
- Drive Description and Usage
  Operator's Guide, **Using Devices and Tools**, → **Using the QIC Tape Drive**
- Drive SCSI-ID
  Disks and Tapes Configuration Information, **Tape Drives**, → The paragraph related to your tape drive model
- QIC Tape Cartridges Preventive Maintenance
  Operator's Guide, **Using Devices and Tools**, → **Using the QIC Tape Drive**, → **Handling QIC Tape Cartridges**
- Drive Upgrading
  Upgrading the System, **Devices**, → **Device Upgrading**, → **Media Drive Upgrading**
- Drive Removal
  Upgrading the System, **Devices**, → **Device Removal**, → **Media Drive Removal**

8mm Tape



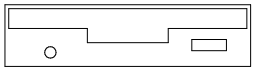
- Drive Description and Usage
  Operator's Guide, **Using Devices and Tools**, → **Using the 8 mm Tape Drive**
- Drive SCSI-ID
  Disks and Tapes Configuration Information, **Tape Drives**, → The paragraph related to your tape drive model
- 8 mm Tape Preventive Maintenance
  Operator's Guide, **Using Devices and Tools**, → **Using the 8 mm Tape Drive**, → **Handling 8 mm Tapes**
- Drive Upgrading
  Upgrading the System, **Devices**, → **Device Upgrading**, → **Media Drive Upgrading**
- Drive Removal
  Upgrading the System, **Devices**, → **Device Removal**, → **Media Drive Removal**

4mm Tape



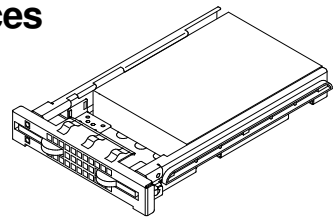
- Drive Description and Usage
  Operator's Guide, **Using Devices and Tools**, → **Using the 4 mm Tape Drive**
- Drive SCSI-ID
  Disks and Tapes Configuration Information, **Tape Drives**, → The paragraph related to your tape drive model
- 4 mm Tape Preventive Maintenance
  Operator's Guide, **Using Devices and Tools**, → **Using the 4 mm Tape Drive**, → **Handling 4 mm Tapes**
- Drive Upgrading
  Upgrading the System, **Devices**, → **Device Upgrading**, → **Media Drive Upgrading**
- Drive Removal
  Upgrading the System, **Devices**, → **Device Removal**, → **Media Drive Removal**

3.5-Inch Diskette



- Drive Description and Usage
  Operator's Guide, **Using Devices and Tools**, → **Using the 3.5-Inch Diskette Drive**
- Drive Configuration
  Disks and Tapes Configuration Information, **3.5 Inch Diskette Drives**, → The paragraph related to your 3.5-inch diskette drive model
- Diskette Preventive Maintenance
  Operator's Guide, **Using Devices and Tools**, → **Using the 3.5-Inch Diskette Drive**, → **Handling Diskettes**
- Drive Installation/Removal
  (maintenance task)
  Maintenance and Service Guide, **Hardware Component Installation**, → **3.5-Inch Diskette Drive**

Hard Disk Devices



- Description of the Device Areas
  Upgrading the System, **Devices**, → **Device Description**

  and

  Using the Disk Expansion Unit, **Disk Expansion Unit Configuration**, → **Disk Expansion Unit Configuration Description**
- Configuration and SCSI-ID
  Upgrading the System, **Devices**, → **Device Configuration**

  and

  Using the Disk Expansion Unit, **Disk Expansion Unit Configuration**, → **Disk Expansion Unit Configuration Rules**
- Hard Disk Description and Usage
  Operator's Guide, **Using Devices and Tools**, → **Using Hard Disks Drives**
- Installing a Hard Disk
  Upgrading the System, **Devices**, → **Device Upgrading**, → **Hard Disk Drive Upgrading**, → **Add a Hard Disk Drive to a Disk Cage**
- Installing a Disk Cage
  (maintenance task)
  Maintenance and Service Guide, **Hardware Component Installation**, → **Disk Cage**, → **Installation**

  and

  Disk Expansion Unit Service Guide, **Hardware Component Installation**, → **Disk Cage**, → **Installation**
- Removing a Hard Disk
  Upgrading the System, **Devices**, → **Device Removal**, → **Hard Disk Drive Removal**

- Hot Swapping
  Upgrading the System, **Devices**, → **Device Hot Swapping**
- Removing a Disk Cage
  (maintenance task)
  Maintenance and Service Guide, **Hardware Component Installation**, → **Disk Cage**, → **Removal**

  and

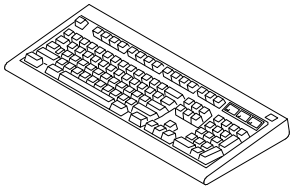
  Disk Expansion Unit Service Guide, **Hardware Component Installation**, → **Disk Cage**, → **Removal**
- SCSI Connections and Configurations
  (maintenance task)
  Maintenance and Service Guide, **SCSI Cables Description and Connection** (the whole chapter)

  and

  Disk Expansion Unit Service Guide, **SCSI Cables Description and Connection** (the whole chapter)

Peripherals

Keyboard

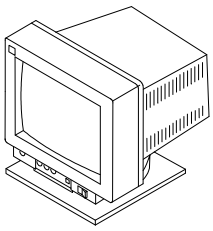


- Connection
  Setting Up the System, **Base Unit Setup Procedure**, → **Connecting Devices**, → **Connecting Keyboard and Mouse**
- Usage
  Operator's Guide, **Using Devices and Tools**, → **Using the Keyboard**
- Problems with the Keyboard
  Setting Up the System, **What To Do When a Problem Occurs**, → **Keyboard**

Mouse

- Connection
  Setting Up the System, **Base Unit Setup Procedure**, → **Connecting Devices**, → **Connecting Keyboard and Mouse**
- Usage
  Operator's Guide, **Using Devices and Tools**, → **Using the Mouse**
- Preventive Maintenance
  Operator's Guide, **Using Devices and Tools**, → **Using the Mouse**, → **Handling the Mouse**
- Problems with the Mouse
  Setting Up the System, **What To Do When a Problem Occurs**, → **Mouse**

Terminal

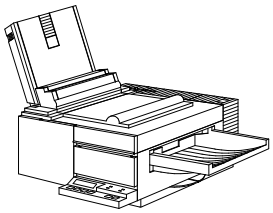


- Connection
  Setting Up the System, **Base Unit Setup Procedure**, → **Connecting Devices**, → **Connecting Terminals**
- Setup
  Terminals and Printers Configuration Guide, **Configuring Terminals**, → The paragraph related to your terminal model

  and

  Terminal and Printer Connections
- Problems with the Terminal
  Setting Up the System, **What To Do When a Problem Occurs**, → **Monitor**

Printer

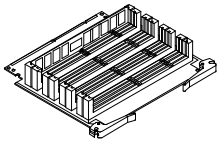


- Connection
  Setting Up the System, **Base Unit Setup Procedure**, → **Connecting Devices**, → **Connecting Printers**
- Setup
  Terminals and Printers Configuration Guide, **Configuring Printers**, → The paragraph related to your printer model

  and

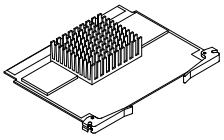
  Terminal and Printer Connections
- Problems with the Printer
  Setting Up the System, **What To Do When a Problem Occurs**, → **Printer**

Memory



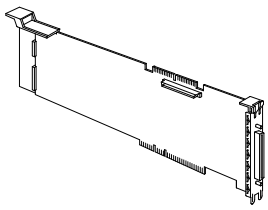
- Description
  Upgrading the System, **Memory**, → **Memory Description**
- Configuration
  Upgrading the System, **Memory**, → **Memory Configuration**
- Add Memory to the System Planar
  Upgrading the System, **Memory**, → **Memory Upgrading**, → **Memory Upgrading on System Planar**
- Add Memory to Memory Risers
  Upgrading the System, **Memory**, → **Memory Upgrading**, → **Memory Upgrading on Memory Risers**
- Add Memory Banks on Memory Risers
  Upgrading the System, **Memory**, → **Memory Upgrading**, → **Adding a Memory Bank on Memory Risers**
- Handling of Memory Errors
  (maintenance task)
  Maintenance and Service Guide, **Maintenance Tools**, → **Handling of Single Memory Errors**

CPU Cards



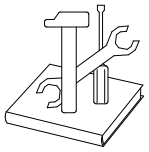
- Description
  Upgrading the System, **CPU's**, → **CPU Description**
- Configuration
  Upgrading the System, **CPU's**, → **CPU Configuration**
- Upgrading
  Upgrading the System, **CPU's**, → **CPU Upgrading**
- Removal
  Upgrading the System, **CPU's**, → **CPU Removal**

Controllers



- Description
  Upgrading the System, **Controllers**, → **Controller Description**
- Configuration
  Upgrading the System, **Controllers**, → **Controller Configuration**
- Installation
  Upgrading the System, **Controllers**, → **Controller Installation**
- Controller Planar Upgrading
  (maintenance task)
  Maintenance and Service Guide, **Hardware Component Installation**, → **RPE Planar (Replacement with FPE Planar)**
- Removal
  Upgrading the System, **Controllers**, → **Controller Removal**
- SCSI Connections
  (maintenance task)
  Maintenance and Service Guide, **SCSI Cables Description and Connection** (the whole chapter)
  and
  Disk Expansion Unit Service Guide, **SCSI Cables Description and Connection** (the whole chapter)
- PCI/ISA Busses and Devices
  Maintenance and Service Guide, **System Hardware**, → **PCI/ISA Busses and Devices**
- List of Supported Controllers
  Maintenance and Service Guide, **PCI/ISA Controller List** appendix

Maintenance Features



These tasks should be performed by technicians or trained people.

General Maintenance Tasks

The following points include information which is relevant to both the base unit and the disk expansion unit.

- Maintenance Tools Description
  Maintenance and Service Guide, **Maintenance Tools** chapter
- Running Off Line Tests
  Maintenance and Service Guide, **Maintenance Tools**, → **Stand-By Menu**
- Running On Line Tests
  AIX Diagnostic Information, the whole manual
- Operator Panel Codes and System Messages
  Maintenance and Service Guide, **System Status Indicators** appendix
- Remote Maintenance
  Maintenance and Service Guide, **Maintenance Tools**, → **Remote Maintenance**
- Service Lines
  Maintenance and Service Guide, **Maintenance Tools**, → **Service Lines**
- Firmware Updating
  Maintenance and Service Guide, **Maintenance Tools**, → **Firmware Updating**
- System Configuration Variables and Flags
  Maintenance and Service Guide, **Maintenance Tools**, → **Stand-By Menu**
  and
  Maintenance and Service Guide, **Maintenance Tools**, → **Open Firmware**
- Open Firmware
  Maintenance and Service Guide, **Maintenance Tools**, → **Open Firmware**
- Handling of a Dead System
  Maintenance and Service Guide, **Maintenance Tools**, → **Handling of a Dead System**

- Handling of Power and Fan Errors
  Maintenance and Service Guide, **Maintenance Tools**, → **Handling of Power and Fan Errors**
- Handling of Memory Errors
  Maintenance and Service Guide, **Maintenance Tools**, → **Handling of Single Memory Errors**

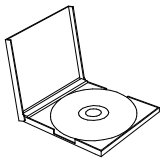
Maintenance Tasks Specific for the Base Unit

- Description of the Hardware Components
  Maintenance and Service Guide, **System Hardware**, → **Description of the Hardware Components**
- Description of the Unit Internal Connectors
  Maintenance and Service Guide, **System Hardware**, → **Internal Connectors**
- Faulty Component Replacement
  Maintenance and Service Guide, **Hardware Component Installation** chapter
- SCSI Connections and Configuration Examples
  Maintenance and Service Guide, **SCSI Cables Description and Connection** chapter

Maintenance Tasks Specific for the Disk Expansion Unit

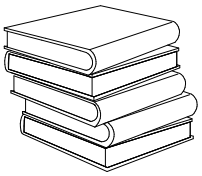
- Description of the Hardware Components
  Disk Expansion Unit Service Guide, **Disk Expansion Unit Hardware Components**, → **Hardware Components Description**
- Description of the Unit Internal Connectors
  Disk Expansion Unit Service Guide, **Disk Expansion Unit Hardware Components**, → **Internal Connectors**
- Faulty Component Replacement
  Disk Expansion Unit Service Guide, **Hardware Component Installation** chapter
- SCSI Connections and Configuration Examples
  Disk Expansion Unit Service Guide, **SCSI Cables Description and Connection** chapter

Online Documentation



- Accessing the Online Documentation from CD-ROM
  Hypertext Information Base Library
  Operating Instructions, **Using the CD-ROM**
- Using the Online Documentation
  (InfoExplorer Database)
  AIX Getting Started, **Accessing Information with InfoExplorer** (the whole chapter)

System Specific Documentation



Setting Up the System 86 A1 86PN
(Paper and CD-ROM)
How to find a suitable location, setup the system, connect peripherals, and start the system for the first time. It also gives an overview of the system characteristics.

Upgrading the System 86 A1 87PN
(Paper and CD-ROM)
How to upgrade the system hardware, adding memory, devices, CPU cards, and controllers.

Operator's Guide 86 A1 88PN
(Paper and CD-ROM)
How to operate system and devices properly.

Disks and Tapes Configuration Information 86 A1 88GX
(Paper)
How to set disk and tape drive addresses and switches. It also includes information on CD-ROM drives setting.

Terminals and Printers Configuration Guide 86 A1 22WE
(Paper and CD-ROM)
How to configure terminals, printers and LAN terminal concentrators.

Terminal and Printer Connections 86 A1 86GX
(Paper)
How to connect a terminal or a printer that is not supplied with the system.

Maintenance and Service Guide 86 A1 89PN
(Paper, on request only)
How to replace faulty parts in the system base unit and how to connect and route SCSI cables. It also explains how to use maintenance features for both the base unit and the disk expansion unit.
This guide is not delivered with the system, but it is available at your supplier if you need it.

AIX Diagnostic Information 86 A1 58HX
(Paper, on request only)
How to run online diagnostics.
This guide is not delivered with the system, but it is available at your supplier if you need it.

Cabling Guide 86 A1 87AQ
(Paper, on request only)
It contains all cabling information.
This guide is not delivered with the system, but it is available at your supplier if you need it.

The following manuals contain information relevant only to the disk expansion unit.

Disk Expansion Unit Quick Set Up 86 A1 12PX
(Paper, delivered with the disk expansion unit)
How to set up the disk expansion unit.

Using the Disk Expansion Unit 86 A1 16PX
(Paper, delivered with the disk expansion unit)
How to operate and configure the disk expansion unit.

Disk Expansion Unit Service Guide 86 A1 13PX
(Paper, on request only)
How to replace faulty components in the disk expansion unit. It also gives information on cables and cable routing.
This guide is not delivered with the disk expansion unit, but it is available at your supplier if you need it.

Note: If you need to order any of these documents, record the related number (e.g. 86 A1 89PN), and contact your Service Representative.

Maintenance Kit

A maintenance kit including a specific set of paper documentation is available at any authorized supplier. It is addressed to both service people and trained customers who are in charge of the system maintenance.

The maintenance kit includes the following hardware manuals, in English only:

- *Upgrading the System*
- *Hardware Tasks: Where Do I Find the Information I Need?*
- *Terminals and Printers Configuration Guide*
- *Disks and Tapes Configuration Information*
- *Maintenance and Service Guide*
- *Disk Expansion Unit Service Guide*
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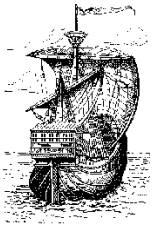

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