

PS1XR-xx Storage Expansion Box

Order Number EK-PSSEB-IN-001

February 1991

This document describes the PS1XR-xx Storage Expansion Boxes. This document is intended to be read with the *BA42 Storage Expansion Box Installation Guide*, EK-SEBOX-IN, in order to provide full information on the PS1XR-xx Storage Expansion Boxes.

digital equipment corporation
maynard, massachusetts

First Printing, February 1991

The information in this document is subject to change without notice and should not be construed as a commitment by Digital Equipment Corporation. Digital Equipment Corporation assumes no responsibility for any errors that may appear in this document.

FCC NOTICE:

The equipment described in this manual generates, uses, and may emit radio frequency energy. The equipment has been type tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such radio frequency interference when operated in a commercial environment. Operation of this equipment in a residential area may cause interference, in which case the user at his own expense may be required to take measures to correct the interference.

No responsibility is assumed for the use or reliability of software on equipment that is not supplied by Digital Equipment Corporation or its affiliated companies.

Copyright ©1991 Digital Equipment Corporation All Rights Reserved

Restricted Rights: Use, duplication, or disclosure by the U.S. Government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.227-7013.

The following are trademarks of Digital Equipment Corporation: applicationDEC, DEC, and the DIGITAL logo.

The following are third-party trademarks: SCO is a registered trademark of Santa Cruz Operation, Inc. UNIX is a registered trademark of UNIX Systems Laboratories, Inc.

This document was prepared using VAX DOCUMENT, Version 1.2.

1 PS1XR-xx Storage Expansion Box

The PS1XR series of storage expansion boxes are designed for use with applicationDEC systems. These systems run the Santa Cruz Operation, SCO UNIX and SCO Open Desktop operating system software.

NOTE: *SCO UNIX, MPX, and Open Desktop, as sold by Digital Equipment Corporation, include SCO patches and enhancements to improve data reliability and performance and incorporate several other required bug fixes in the kit. All of these enhancements, patches, and fixes are available from SCO, but for your convenience have been packaged into one kit by Digital. To ensure reliable operation, you should only use SCO UNIX, MPX, and Open Desktop available from Digital on applicationDEC systems. Digital Equipment Corporation only supports SCO UNIX, MPX, and Open Desktop kits that have been provided by Digital Equipment Corporation.*

2 Differences Between the BA42 Storage Expansion Box and the PS1XR-xx Storage Expansion Box

The PS1XR-xx Storage Expansion Box differs from the BA42 Storage Expansion Box described in the *BA42 Storage Expansion Box Installation Guide* in the following ways:

- Disks in a PS1XR-xx Storage Expansion Box are configured to spin-up at power-on, not on command. This makes the disks compatible with SCO UNIX and MS-DOS.
- SCSI cables with straight connectors, instead of angled connectors, are shipped with the box.

In all other respects, the PS1XR-xx Storage Expansion Box is the same as the BA42 Storage Expansion Box described in the *BA42 Storage Expansion Box Installation Guide*. Refer to the *BA42 Storage Expansion Box Installation Guide* for full details on how to set SCSI ID switches and install additional drives, and other information on the PS1XR-xx Storage Expansion Box.

3 Software Support

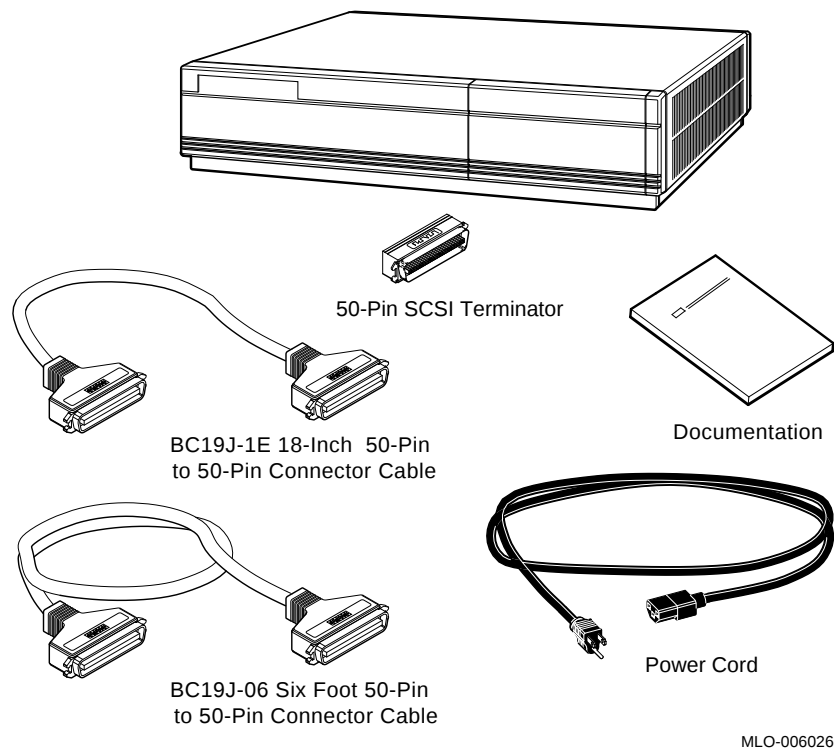
The Storage Expansion disk drives need to be configured under software after installation. When connected to a CPU/SCSI installed in an applicationDEC multiprocessor system, the drives are configured using the SCO/MPX software extensions. Refer to the *SCO MPX Multiprocessor Extension Release and Installation Notes* for details. When connected to an ISA SCSI adapter in an applicationDEC single processor system, the

drives are configured using the SCO UNIX system administration shell. Refer to the *SCO UNIX System Administrator's Reference Manual* supplied with SCO UNIX or the *SCO Open Desktop Administrator's Guide* supplied with Open Desktop.

4 Kit Contents

Figure 1 shows the contents of the PS1XR-xx Storage Expansion Boxes.

Figure 1: PS1XR-xx Storage Expansion Box Contents



Each PS1XR-xx expansion box is shipped from the factory with the following accessories.

- Power cord
- A 50-pin terminator for terminating the SCSI bus on the expansion box

2 PS1XR-xx Storage Expansion Box

- A 180-centimeter (72-inch) 50-pin SCSI cable with straight end connectors for connection to an applicationDEC system
- A 45-centimeter (18-inch) 50-pin SCSI cable with straight end connectors for connection between two storage expansion boxes
- Documentation

5 Configurations Available

The PS1XR-xx Storage Expansion Boxes are available in the configurations shown in Table 1.

Table 1: External Storage Expansion Options

Option	Disks Installed	Voltage	Total External Storage
PS1XR-CA	1 665 MB RZ56	120	665 MB
PS1XR-C3		240	
PS1XR-BA	2 665 MB RZ56	120	1.3 GB
PS1XR-B3		240	
PS1XR-FA	1 1.2 GB RZ57	120	1.2 GB
PS1XR-F3		240	
PS1XR-EA	2 1.2 MB RZ57	120	2.4 GB
PS1XR-E3		240	

Expansion kits are also available for adding additional 665 MB or 1.2 GB hard disks to the single disk expansion storage boxes (PS1XR-C and PS1XR-F). These are listed in Table 2.

Table 2: Storage Expansion Box Options

Options	Contents	Storage Added
PS1XR-DA	1 665 MB RZ56 disk	665 MB
PS1XR-GA	1 1.2 GB RZ57 disk	1.2 GB

Up to two storage expansion boxes can be connected together in a SCSI bus. Thus the maximum external storage capacity available is 4.8 GB of data.

Use the instructions in the *BA42 Storage Expansion Box Installation Guide* manual to install a second hard disk drive in the PS1XR-xx storage expansion box.

6 Connecting the PS1XR-xx Storage Expansion Box to Your System

To connect the PS1XR-xx storage expansion to your system, follow the instructions as shown in the *BA42 Storage Expansion Box Installation Guide*. In summary these steps are:

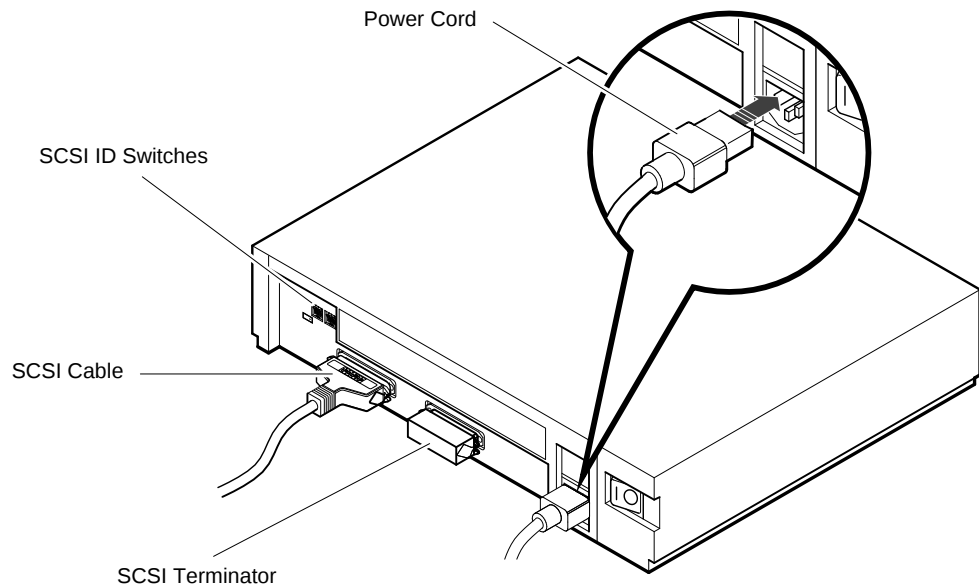
1. Shut off power.
2. Check the SCSI address of the PS1XR-xx to ensure it is set for your configuration.
3. Connect the 180-centimeter (six foot) SCSI cable from your system's SCSI adapter to the storage expansion box. (The 45-centimeter cable can also be used if desired and physical restraints permit it.)
4. Install a terminator on the unused SCSI port of the expansion box.
5. Connect the power cord.

NOTE: *Both ends of the SCSI bus must be terminated. If your SCSI adapter has internal and external devices, the terminator resistor packs on the adapter must be removed, and the ends of both SCSI cables must be terminated. If your SCSI adapter has only external devices, the terminator resistor packs on the adapter must remain installed and the unused port on the expansion box must be terminated.*

Refer to your SCSI host adapter documentation for the location of terminator resistor packs and further information on terminating the SCSI bus.

Figure 2 illustrates the main steps involved in connecting the PS1XR-xx expansion box.

Figure 2: Connecting the PS1XR-xx Storage Expansion Box

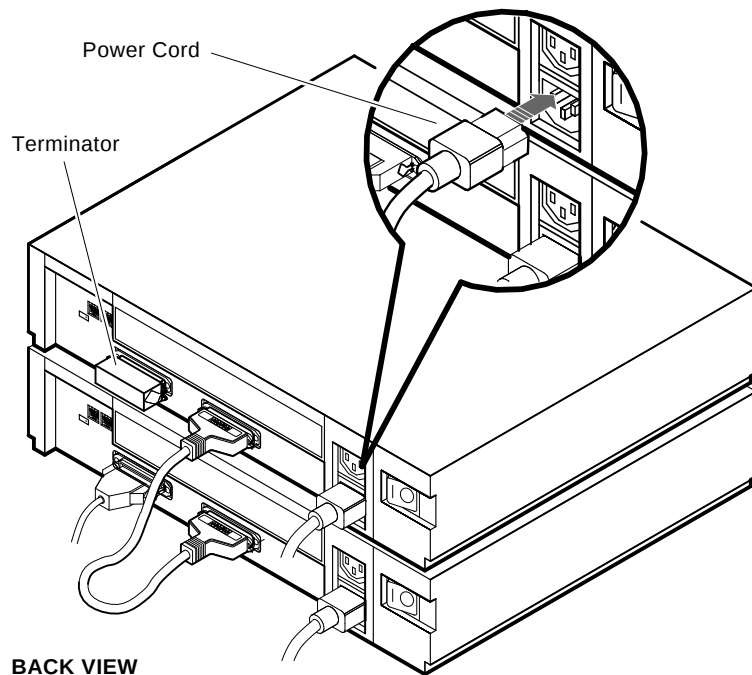


MLO-006180

7 Connecting Two Storage Expansion Boxes

Two storage expansion boxes can be connected together. Use the 45-centimeter (eighteen-inch) cable to connect two storage expansion boxes together. Figure 3 shows how two boxes are connected together. Make certain that a terminator is installed at the end of the SCSI bus.

Figure 3: Connecting Two Storage Expansion Boxes



MLO-006027

8 Additional Information

Refer to the *BA42 Storage Expansion Box Installation Guide* for additional information on your PS1XR-xx Storage Expansion Box.

Refer to the *applicationDEC 433MP Technical Configuration and Option Installation Guide*, EK-PS100-CG, for additional information on connecting the PS1XR-xx Storage Expansion Box to an applicationDEC 433MP system.

For software configuration information, refer to the *SCO MPX Multiprocessor Extension Release and Installation Notes* if the expansion box is connected to a CPU/SCSI module. When connected to an ISA SCSI adapter in an applicationDEC single processor system, the drives are configured using the SCO UNIX system administration shell. Refer to the *SCO UNIX System Administrator's Reference Manual* supplied with SCO UNIX or the *SCO Open Desktop Administrator's Guide* supplied with Open Desktop.

6 PS1XR-xx Storage Expansion Box