InfoTower

Installation and Operating Information

Order Number: EK-INFOE-OM. B01

First Printing, February 1993 Second Edition, April 1993

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.

The software described in this document is furnished under a license and may be used or copied only in accordance with the terms of such license.

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.

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.

© Digital Equipment Corporation 1993.

All Rights Reserved.

The following are trademarks of Digital Equipment Corporation: DEC, Digital, RRD42, and the DIGITAL logo.

All other trademarks and registered trademarks are the property of their respective holders.

This document was prepared using VAX DOCUMENT, Version 2.1.

Contents

Pi	Preface vii		
1	Overview		
	Features Cabinet Description Front View Rear View	1–1 1–2 1–3 1–4	
2	Installation		
	Summary of Installation	2-1	
	Step One: Position the InfoTower.	2-1	
	Choosing the Right Location	2-2	
	Unpacking the Boxes	2-2	
	Determining InfoTower Power Requirements	2-3	
	Step Two: Verify InfoTower Cabinet Components	2-3	
	Step Three: Prepare for the Installation	2-4	
	Step Four: Connect the Power Cable	2–5	
	Step Five: Connect SCSI Cables for InfoServer 100 System	2–6	
	Step Six: Connect SCSI Cables for InfoServer 150 System	2-10	
	Step Seven: Connect other External Devices	2-13	
	Step Eight: Turn on the Power to the InfoTower Cabinet	2-15	
	Step Nine: Turn on the Power to the InfoServer System	2–15	
	Step Ten: Verify Drive Access	2–15	

3	Adding A	Additional SCSI Drives	
	Inserting	ing Drives	3–1 3–2 3–5
4	Troubles	shooting	
	Problem	s and Suggested Solutions	4-1
A	Specific	eations	
	Physical Input El Output l	ectrical	A-1 A-2 A-2 A-3 A-4
В	Related	Documentation	
С	Field Re	eplaceable Units	
in	dex		
E	kamples		
	2–1 2–2	Display for InfoServer System	2-15 2-16
Fi	gures		
• •	•	T.C. C. C. C.	
	1–1 1–2	InfoTower Cabinet	1-2 1-3
	1–3	Rear View of the InfoTower Cabinet.	1-4
	2-1	InfoServer 100 System with an InfoTower Cabinet	2-7
	2-2	Connecting InfoTower to an InfoServer 100 System	2-8
	2-3	InfoServer 150 System with an InfoTower Cabinet	2-10
	2-4	Connecting InfoTower to an InfoServer 150 System	2-11
	2-5	Connecting Two InfoTowers to an InfoServer 150 System	2-13

2–6	Connecting External Devices to the InfoTower Cabinets	2-14
3-1	Drive Mounting Bracket	3–3
3–2	Properly Seating Drives	3-4
3–3	Driver Frame Lever	3-5
Tables		
2-1	Drive Switch Settings for the InfoServer 100 System	2-9
2-2	Drive Switch Settings for the InfoServer 150 System	2-12
3–1	Drive Switch/Jumper Settings	3-1
4-1	Problems and Suggested Solutions	4-1
A-1	Functional Specifications	A-1
A-2	Physical Specifications	A-2
A-3	Input Characteristics - Electrical Specifications	A-2
A-4	Output Characteristics - Electrical Specifications	A-3
A-5	Acoustic Values ¹ (Declared Values per ISO 9296 and ISO	
	7779)	A-4
A-6	Schallemissionswerte ¹ (Werteangaben nach ISO 9296 und	
	ISO 7779/DIN EN27779)	A-4
B-1	Related Documents	B-1
C-1	InfoTower FRUs	C-1



Preface

This guide describes how to install and troubleshoot the InfoTower cabinet. It also contains configuration rules and management information.

Organization

This manual contains four chapters and two appendixes.

Chapter 1, Overview—Describes the features of the InfoTower cabinet. It identifies and describes the cabinet components.

Chapter 2, Installation—Describes the configuration rules for connecting an InfoTower cabinet to an InfoServer 100 or 150 system. It describes two types of physical configurations: desktop and tower. It describes how to position the unit, prepare the unit for installation, connect the cables, and power up the InfoTower cabinet and InfoServer system.

Chapter 3, Adding Additional SCSI Drives—Describes how to add additional drives to the system.

Chapter 4, Troubleshooting—Describes problems and lists the suggested solutions. It includes installation and removal information on CD ROM drives.

Appendix A, Specifications—Contains the electrical and mechanical specifications for operating the expander cabinet.

Appendix B, Related Documentation—Contains a listing of related documents and ordering information.

Appendix C, Field Replaceable Units—Contains a listing of the field replaceable units (FRUs).

Conventions

The following conventions are used in this guide:

Convention	Meaning		
Note	Provides general information.		
Caution	Provides information to prevent damage to equipment and software.		
Warning	Provides information to prevent personal injury.		
bold text	Bold text represents user input. For example:		
	DECbridge> Set Protocol		
parameters	Parameters are italicized. For example:		
	SHOW PORT slot number		
	Characters within brackets represent optional parameters. For example:		
	SHOW PORT [hub number, slot number]		
\triangle	Symbol for caution.		
4	Symbol for fault.		

Overview

This chapter lists the features and components of the InfoTower cabinet. Figure 1-1 shows the InfoTower cabinet.

Features

The features of the InfoTower are as follows:

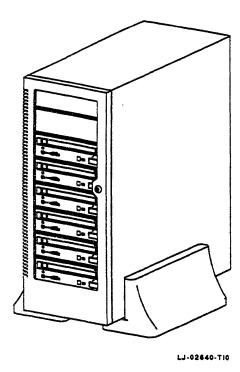
- InfoServer-100 and InfoServer-150 compatible
- Eight SCSI drive bays
- Desktop and tower configurations
- Locked environment for SCSI drives
- Quick and easy installation and removal of drives
- Hinged, see-through cabinet door
- 200 watt power supply system

Overview Cabinet Description

Cabinet Description

The InfoTower cabinet is a hardware-only product. It provides additional SCSI drive capacity for either an InfoServer 100 or InfoServer 150 system. You can access SCSI drives in the InfoTower as you would internal InfoServer system drives.

Figure 1-1 InfoTower Cabinet

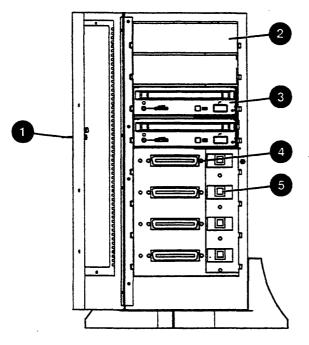


1-2 Overview

Front View

Figure 1-2 shows the front view of the InfoTower cabinet.

Figure 1–2 Front View of the InfoTower Cabinet



LJ-02513-TI0

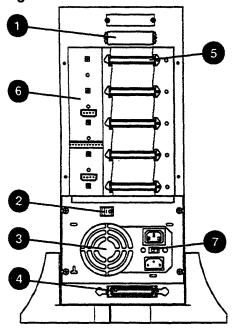
Location	Description	
0	Cabinet door lock and keys	
9	Bezels for empty drive slots	
3	One to seven internally-mounted SCSI drives, including mounting frames	
•	SCSI internal connector	
6	Power interface	

Overview Cabinet Description

Rear View

Figure 1-3 shows the rear view of the InfoTower cabinet.

Figure 1-3 Rear View of the InfoTower Cabinet



LJ-02648-TIO

Location	Description	
•	Exterior SCSI interface port with terminator	
9	Power supply on/off switch	
8	Fan	
•	Exterior SCSI interface port without terminator	
6	Internal SCSI backplane	
6	dc power backplane	
•	ac voltage select	

This chapter describes how to install the InfoTower cabinet.

Summary of Installation

The following summarizes the steps to install an InfoTower cabinet. Each of these steps is described in more detail in the sections that follow:

- 1. Position the InfoTower
- 2. Verify InfoTower cabinet components
- 3. Prepare for the installation
- 4. Connect the power cable
- 5. Connect the SCSI cables for the InfoServer 100 system
- 6. Connect the SCSI cables for the InfoServer 150 system
- 7. Connect other external devices
- 8. Turn on the power to the InfoTower cabinet
- 9. Turn on the power to the InfoServer system
- 10. Verify SCSI drive access

Step One: Position the InfoTower.

Due to the length of the SCSI cable (three-foot cable) and the power cable, position the InfoTower cabinet within three feet of the InfoServer system and within the length of the power cable to a power source outlet.

Step One: Position the InfoTower.

Choosing the Right Location

Use the following guidelines to choose the best location for your InfoTower cabinet. Choosing an optimal operating environment is crucial in keeping your system operating at its best.

- Carefully read all installation instructions before you turn on the power.
- Keep the temperature between 10 to 35 degrees C (50 to 98 degrees F).
- Keep the relative humidity between 10 to 85 percent.
- Keep the air well circulated to prevent excess heat and dust from accumulating.
- Keep your equipment away from heaters, photocopiers, direct sunlight, and abrasive particles.
- Before you set up your system, select a surface that is large enough to hold the system unit. Your desk or work table is a good choice.
- Keep the area clean. Do not place food or liquid on or near your equipment, and do not place your system unit directly on the floor. Dust and dirt will damage the system components.
- Keep air vents clear on the front and rear of the system unit for proper ventilation. Blocking the air vents can cause the system unit to overheat.
- Connect your system to a dedicated grounded circuit.
- If you have several pieces of equipment that need to be plugged into an electrical outlet, then use a grounded power strip. Many power strips come with an on/off switch and a surge protector.

Do not exceed the circuit power capacity.

 To avoid damaging equipment that has been moved inside from a cold environment, let the equipment warm to room temperature before you turn on the power.

Unpacking the Boxes

Caution			
Because of the weight of the system unit, 56 lbs (25.45 kg), two people should lift the equipment out of the shipping carton and place it on a work surface.			

When unpacking the boxes, keep the contents of each box separate from the others.

Determining InfoTower Power Requirements

The InfoTower cabinet uses a standard switch selectable 110/220 V, 50/60 Hz, ac power source. To protect the InfoTower and its internal components, you should use an approved surge suppresser between the power source and the cabinet.

Step Two: Verify InfoTower Cabinet Components.

After you have selected a proper location for the InfoTower cabinet and have carefully unpacked the box contents, check that all components have been included in the shipment. Verify that the number and types of SCSI drives mounted in the cabinet correspond to the order number and types of drives that were ordered.

Ensure that the accessories bag contains the following items:

- Two keys
- Four rubber feet
- One power cord
- Two external SCSI cables: BC56H-03, and BC19J-03
- One terminator
- One template (guide showing how to position the feet)
- InfoTower Installation and Operating Information
- RRD42 Disc Drive Owner's Manual
- Four or seven CD ROM caddies

Step Three: Prepare for the Installation.

Step Three: Prepare for the Installation.

To prepare for the installation of the InfoTower cabinet, perform the following steps:

1.	Make sure that all users terminate their sessions on the InfoServer system. If there are users on the system, then lock out any subsequent accesses by entering the SET SERVER STATE SHUT command at the InfoServer system console.			
	Caution			
	Never install or remove SCSI drives if the power to either the InfoTower cabinet or InfoServer system is on. Doing so can crash the InfoServer system and cause damage to any attached devices, including SCSI drives in the InfoTower cabinet.			
2.	Turn the power off on the InfoServer system.			
3.	Turn the power off on any connected external devices.			
4.	Move the InfoTower cabinet into the desktop or tower (vertical) position.			
	Warning			
	For the vertical installation of the InfoTower, use an enclosure mounting stand.			
	Warnung			
	Bei der vertikalen installation des InfoTowers, verwenden Sie einen Ständer für das Gehäuse.			
	Avertissement			
	Pour une installation veticale de l'InfoTower, utilisez un pied pour soutenir le boitier.			

Installation Step Three: Prepare for the Installation.

Cuidado	
	Para instalación vertical de la InfoTower usa usted una plataforma montada en un recinto.
	For desktop orientation, use the template to attach the four rubber feet.
5.	Unlock and open the cabinet door. Remove the protective insert. Save the insert for future shipping.
	Note
	When setting up a desktop unit, remove the key after unlocking the door so that it will open completely.
6.	Visually inspect each SCSI drive to ensure that it is seated properly. See Figure 3-2 and Figure 3-3.
Step Fo	our: Connect the Power Cable.
•	Caution
	Check the setting of the voltage select switch and ensure that it matches your site requirements.
T	o connect the power cable:

- 1. Locate and remove the label over the power connector.
- 2. Check the power switch setting.
- 3. Plug in the power cable.

Step Five: Connect SCSI Cables for InfoServer 100 System.

Step	Five: Connect SCSI Cables for InfoServer 100 System.
	Note
	If you have an InfoServer 150 system, proceed to Step Six: Connect SCSI Cables for the InfoServer 150 system.

The InfoServer 100 system has one internal hard drive and up to two internal CD-ROM drives. The internal hard disk and one of the CD-ROM drives reside on the A bus. The second CD-ROM drive, if present, resides on the B bus.

Up to six additional SCSI devices can be added to the B bus. The six external devices can be any one of the following combinations:

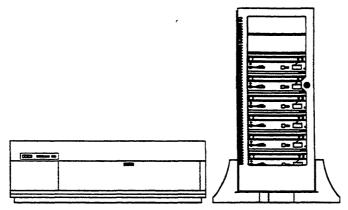
- Six SCSI drives in the InfoTower cabinet
- A combination of SCSI drives in the InfoTower cabinet and external SCSI devices

Figure 2-1 shows the InfoServer 100 system with the InfoTower in the desktop and tower configurations.

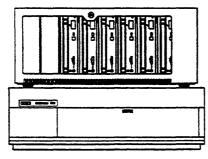
The InfoTower cabinet uses a BC19J-03 cable to connect to the InfoServer 100. You connect one end of the cable to the SCSI port on the back of the InfoTower cabinet and the other end to the external SCSI port on the back of the InfoServer 100.

Installation Step Five: Connect SCSI Cables for InfoServer 100 System.

Figure 2-1 InfoServer 100 System with an InfoTower Cabinet



Tower Configuration



Desktop Configuration

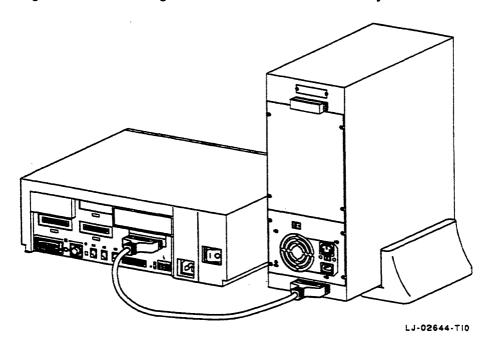
LJ-02639-TI0

Step Five: Connect SCSI Cables for InfoServer 100 System.

Figure 2-2 shows the connections from an InfoTower cabinet to an InfoServer 100 system. The InfoServer 100 has two SCSI buses: A and B. The A bus cannot be expanded. The B bus can be expanded using the external SCSI port. When setting the SCSI address, refer to Table 2-1.

Note			
You can use one of the two external SCSI connectors on the rear of the InfoTower cabinet to connect the InfoTower to the InfoServer system. The other connector can be used to connect external devices.			

Figure 2-2 Connecting InfoTower to an InfoServer 100 System



Installation Step Five: Connect SCSI Cables for InfoServer 100 System.

Table 2-1 lists the drive switch settings for the InfoServer 100 system.

Table 2–1 Drive Switch Settings for the InfoServer 100 System

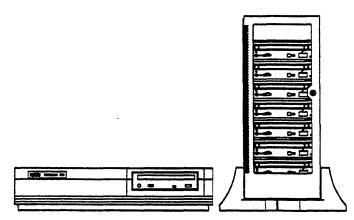
Device	Bus	SCSI Address	Description
DK0:	A	0	Not available
DK1:	A	1	Hard disk
DK2:	A	2	Internal CD ROM drive
DK3:	A	3	Not available
DK4:	A	4	Not available
DK5:	A	5	Not available
DK6:	A	6	SCSI controller
DK7:	A	7	Not available
DK0:	В	0	Available
DK1:	В	1	Available
DK2:	В	2	Available
DK3:	В	3	Available
DK4:	В	4	Available
DK5:	В	5	Internal CD ROM drive
DK6:	В	6	SCSI controller
DK7:	В	7	Available

Step Six: Connect SCSI Cables for InfoServer 150 System.

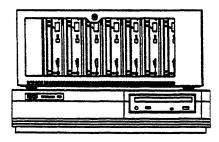
Step Six: Connect SCSI Cables for InfoServer 150 System.

The InfoServer 150 system contains an internal hard disk and one CD-ROM. Figure 2–3 shows the InfoServer 150 system with the InfoTower in the desktop and tower configurations.

Figure 2-3 InfoServer 150 System with an InfoTower Cabinet



Tower Configuration



Desktop Configuration

Installation Step Six: Connect SCSI Cables for InfoServer 150 System.

The InfoTower cabinet uses a BC56H-03 cable to connect to an InfoServer 150 system. You can connect the cabinet to either the A or B SCSI bus of the InfoServer system. You can connect a maximum of five external devices to the InfoServer system A bus and a maximum of seven external devices to the InfoServer system B bus. Facing the rear of the InfoServer 150 system, the A port is on the left and the B port on the right. Figure 2-4 shows the connection from port B of the InfoServer 150 system to the InfoTower cabinet.

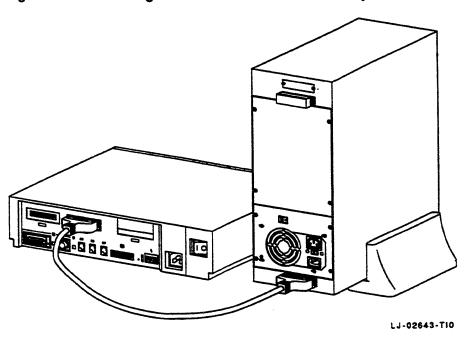


Figure 2-4 Connecting InfoTower to an InfoServer 150 System

You can use one of the two external SCSI connectors on the rear of the InfoTower cabinet to connect the InfoTower to the InfoServer system. The other connector can be used to connect external devices.

Note

Step Six: Connect SCSI Cables for InfoServer 150 System.

When setting the SCSI addresses, refer to Table 2-2.

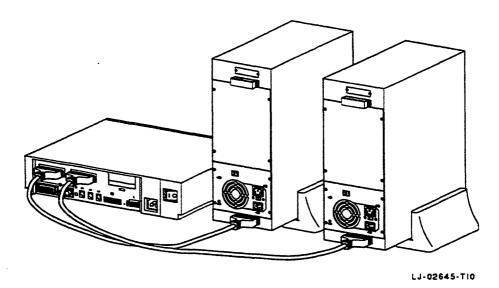
Table 2–2 Drive Switch Settings for the InfoServer 150 System

Device	Bus	SCSI Address	Description
DK0:	A	0	Available
DK1:	A	1	Internal hard disk
DK2:	A	2	Internal CD ROM drive
DK3:	A	3	Available
DK4:	A	4	Available
DK5:	A	5	Available
DK6:	A	6	SCSI controller
DK7:	A	7	Available
DKO:	В	0	Available
DK1:	В	1	Available
DK2:	В	2	Available
DK3:	В	3	Available
DK4:	В	4	Available
DK5:	В	5	Available
DK6:	В	6	SCSI controller
DK7:	В	7	Available

Installation Step Six: Connect SCSI Cables for InfoServer 150 System.

Figure 2-5 shows two InfoTower cabinets connected to the InfoServer 150 system.

Figure 2-5 Connecting Two InfoTowers to an InfoServer 150 System



Step Seven: Connect other External Devices.

You can use one of the two external SCSI connectors on the rear of the InfoTower cabinet to connect the InfoTower to the InfoServer system.

Note

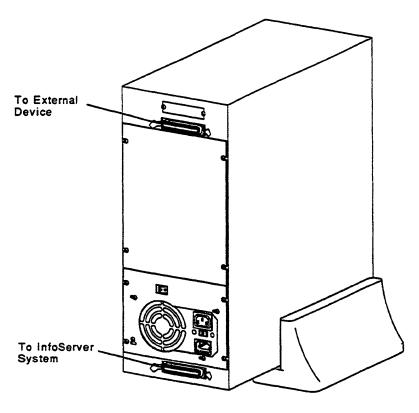
Figure 2-6 shows the external SCSI connectors on the InfoTower cabinets.

The other connector can be used to connect external devices.

Connect the InfoTower cabinets directly to the InfoServer system. Connect the external devices to the InfoTower cabinets. You must assign a unique SCSI ID address to each device on the SCSI bus. The order of devices does not matter, except with a tape drive, which should be the last device in the chain. You must terminate the last device on the bus.

Step Seven: Connect other External Devices.

Figure 2-6 Connecting External Devices to the InfoTower Cabinets



LJ-02647-TI0

To connect other external devices, perform the following steps:

- 1. Make sure that the SCSI addresses of the external devices do not conflict with the labeled addresses of the SCSI drives contained in the InfoTower cabinet.
- 2. Remove the terminator from the SCSI port on the back of the InfoTower cabinet that is not connected to the InfoServer system.
- 3. Connect the SCSI cable attached to the first external device in the chain to the SCSI port on the InfoTower cabinet.
- 4. Check other connections in the chain to ensure the connections are secure and that the last device in the chain is terminated.

Step Eight: Turn on the Power to the InfoTower Cabinet.

Turn the power on to the cabinet. The power switch is located near the fan at the rear of the cabinet. Turn the power on to any attached external SCSI devices.

Step Nine: Turn on the Power to the InfoServer System.

Turn on the power to the InfoServer system. Example 2-1 shows the InfoServer system console displays. When booting is complete, a password prompt will appear on the console. Refer to Chapter 4 if the system fails to boot.

Example 2-1 Display for InfoServer System

```
KA41-2 V1.0

F_.E.D.C.B.A.9_.8..7..6..5..4_.3_.2_.1...
? E 0040 0000.0005
? C 0080 0000.4001

83 BOOT SYS
-DKA100

DEC InfoServer 150
Copyright (c) 1991 Digital Equipment Corporation
%ESS-I-INITDisc, Disc Initialization complete, 14 devices found
```

Step Ten: Verify Drive Access.

At the InfoServer system console, enter the SHOW DEVICE command to ensure that all of the connected drives are accessible by the InfoServer system. Example 2–2 shows the SHOW DEVICE command display.

Step Ten: Verify Drive Access.

Example 2-2 SHOW DEVICE Display

InfoServer> show device

Device Name	Device State	Device Type	Device Address	Dev. Size/ Record Num.	Volume Label
DK1:	On	Hard Disk	A/001	237588	UNKNOWN
DK2:	On	Compact Disc	A/002	0	
DK8:	On	Compact Disc	B/000	891672	OPTMOD
DK9:	On	Compact Disc	B/001	1218000	CDDOC04MAR21
DK10:	On	Compact Disc	B/002	400780	SMC
DK11:	On	Compact Disc	B/003	891680	CD DOC 82861
DK12:	On	Compact Disc	B/004	1218000	CDDOC04MAR22
DK13:	On	Compact Disc	B/005	0	
DK15:	On	Compact Disc	B/007	1171212	UNKNOWN

If all the devices are displayed, then there are no SCSI ID conflicts. Refer to Chapter 4 if any of the the SCSI drives are not displayed.

The InfoTower is manufactured with device addresses starting at address 000. The address 000 unit is always placed either in the front bottom slot, if positioned in the tower orientation, or in the front right most slot, if positioned in the desktop orientation.

Device addresses increment by one, up to the maximum number of devices in the enclosure. Address 006 does not increment by one, because it is reserved for the system controller.

Adding Additional SCSI Drives

This chapter describes how to add additional drives to the InfoServer system and InfoTower cabinet. (The H056-drive mounting bracket option is purchased separately.)

Note			
The power supply used in the InfoTower requires a minimum load of 3A on the +5V source for proper regulation. Ensure that the devices installed in the cabinet present a load to satisfy this requirement.			

Configuring Drives

When configuring a drive, refer to the configuration information provided with the drive. SCSI device addresses are generally set in accordance with Table 3-1. Always turn the power off before installing the drive. Always check to see which device addresses are in use before adding devices.

Table 3-1 Drive Switch/Jumper Settings

Device Address	ID1	ID2	ID3	
0	0	0	0	
1	1	0	0	
2	0	1	0	

^{1 =} On/In 0 = Off/Out

(continued on next page)

Adding Additional SCSI Drives **Configuring Drives**

Table 3–1 (Cont.) Drive Switch/Jumper Settings

Device Address	ID1	ID2	ID3	
3	1	1	0	
4	0	0	1	
5	1	0	1	
6	N/A	N/A	N/A	
7	1	1	1	

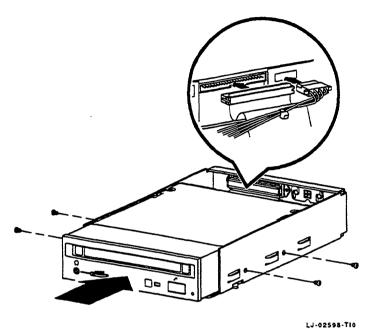
Inserting Drives

With the power off to both the InfoServer system and InfoTower cabinet, perform the following steps to insert a drive into the InfoTower cabinet:

- 1. Check that the SCSI ID jumper/switches are set correctly.
- 2. Mount the SCSI device into the drive mounting bracket as follows:
 - a. Position the SCSI device into the drive mounting bracket as shown in Figure 3-1.

^{1 =} On/In 0 = Off/Out





The installation of non-Digital or Digital qualified devices in combinations not tested by Digital, may result in configurations that do not comply with EMC regulations or product safety requirements.

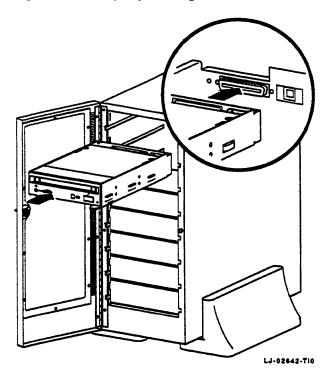
Note

- b. Connect the 50-pin SCSI cable to the SCSI device.
- c. Plug the dc power connector into the SCSI device.
- d. Position the SCSI device such that the screw holes of the device and the bracket line up. Use the appropriate screws to attach the drive mounting bracket to the SCSI device.
- 3. Unlock and open the InfoTower cabinet door.
- 4. Remove a bezel, if necessary, and align the drive mounting frame with any vacant drive slot within the InfoTower cabinet.

Adding Additional SCSI Drives Inserting Drives

5. Gently push the drive into the vacant slot until its front face is flush with all other drives in the InfoTower cabinet as shown in Figure 3-2.





6. To ensure proper SCSI bus and power connectivity, check to see that the drive frame lever is in position and that the drive is locked into its slot as shown in Figure 3-3.

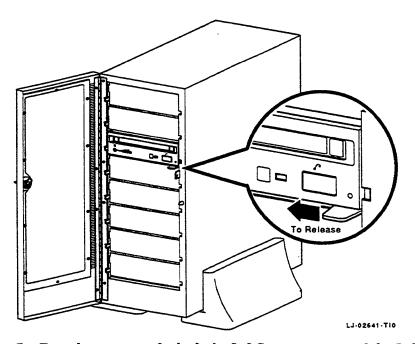


Figure 3–3 Driver Frame Lever

Turn the power on for both the InfoServer system and the InfoTower.

Removing Drives

Note	
Eject any removable media from the drive before performing the following procedures.	

With the power off to both the InfoServer system and InfoTower cabinet, perform the following steps to remove a drive from the InfoTower cabinet:

- 1. Unlock and fully open the InfoTower cabinet front door.
- 2. To release and remove the SCSI device, move the drive frame lever to the left (Figure 3-3).
- 3. Hold onto the lever and the exterior of the drive and gently pull the drive out of the InfoTower cabinet.

Adding Additional SCSI Drives Removing Drives

- 4. To remove the SCSI device from the drive mounting bracket, perform the following steps:
 - a. Remove the screws on the sides of the bracket holding the SCSI device in place.
 - b. Disconnect the 50-pin SCSI cable and unplug the dc power connector as shown in Figure 3-1.

Troubleshooting

This chapter describes how to troubleshoot the InfoTower cabinet.

Problems and Suggested Solutions

Table 4-1 lists problems and suggested solutions when troubleshooting an InfoTower cabinet:

Table 4-1 Problems and Suggested Solutions

Problem	Solution		
InfoTower does not	Check the following:		
power on (fan is not turning).	 Power connections to InfoTower cabinet and power source. 		
	 Power outlet at power source with another device. If the problem still exists, then perform the following: 		
	Replace ac power cable.		
	Replace power supply unit.		
InfoServer system boot process does not recognize an installed SCSI drive.	Check the SCSI ID jumper settings. If the problem still exists, then power up the InfoTower and InfoServer system and reboot the system.		
InfoServer system does	Check the following:		
not recognize the bus.	Bus termination.		
	SCSI cable connection.		
	Power to InfoTower cabinet.		

(continued on next page)

Troubleshooting Problems and Suggested Solutions

Table 4-1 (Cont.) Problems and Suggested Solutions

Follow suggestions for when the InfoServer system does not recognize an installed SCSI drive.		
Check for the following conditions:		
• Power to the drive is present.		
Drive is empty.		
Drive is seated properly.		
 Disc is properly inserted into a CD disc caddy. 		
Depress the ejection button longer. Check for the following conditions:		
Drive is not empty.		
Drive is seated properly.		

Specifications

Functional

Table A-1 lists the functional specifications for the InfoTower cabinet.

Table A-1 Functional Specifications

Specification	Value or Description
System enclosure	Desktop and Tower
Storage capability	Seven 5.25" half-height SCSI devices
Interface	SCSI
Nominal ac voltage	120/240 switch selectable
Power source phasing	Single phase
Nominal frequency	50 Hz - 60 Hz
Voltage ranges	90 V - 135 V 180 V - 265 V
Line frequency tolerance	47 Hz - 63 Hz
Maximum ac running current	5 A @ 115 V 3 A @ 230 V
Maximum power consumption	307 W
Height	17.78 cm (7.0 in)
Width	43.18 cm (17.0 in)
Depth	43.18 cm (17.0 in)
Weight	$25.45\ kg$ (56 lbs) with 7 CD ROMs; $15.45\ kg$ (34 lbs) without CD ROMs

(continued on next page)

Specifications Functional

Table A-1 (Cont.) Functional Specifications

The second of th			
Specification	Value or Description		
Non-condensing maximum operating altitude	2.4 KM (8000 feet)		

Physical

Table A-2 lists the physical specifications for the InfoTower cabinet.

Table A-2 Physical Specifications

Specification	Operating	Non-Operating		
Ambient temperature	10 - 35 degrees C	-40 - 66 degrees C		
Relative humidity	10% - 85%	10% - 95% (packaged) non-condensing		
Maximum wet bulb	28 degrees C (82 degrees F) (non-condensing)	32 degrees C (90 degrees F) (packaged) (non-condensing)		
Altitude	8,000 feet	16,000 feet		
Heat dissipation	1,050 BTU/h	N/A		
Temperature gradient	11 degrees C/hr (20 degrees F/hr)	20 degrees C/hr (36 degrees F/hr)		

Input Electrical

Table A-3 lists the input electrical specifications for the InfoTower cabinet.

Table A-3 Input Characteristics - Electrical Specifications

Specification	Value or Description			
Line voltage	90 - 135 V ac, 179 - 265 V ac (switch selectable)			
Line frequency	47 - 63 Hz			
Line current	8 A max. @ 90 V ac including 3A auxiliary 6 A max. @ 180 V ac including 2A auxiliary			
Power consumption	60 W @ min. load			

(continued on next page)

Table A-3 (Cont.) Input Characteristics - Electrical Specifications

Specification	Value or Description		
Apparent power	462 VA @ max. load, 120 V ac range 507 VA @ max. load, 220 V ac range		
Power factor	.5		
Inrush current	13.6 A @ 120 V ac, 9.9 A @ 220 V ac		
Efficiency	65%		

Output Electrical

Table A-4 lists the output electrical specifications for the InfoTower cabinet.

Table A-4 Output Characteristics - Electrical Specifications

Nominal	Load Current	Regulation Tolerance
Output Voltage	Max./Min.	Max/Min.
5 V dc	20 A / 3 A	5.25 V / 4.8 V
12 V dc	8 A / 0 A	12.72 V / 11.40 V
-5 V dc	0.5 A / 0 A	-5.50 V / -4.50 V
-12 V dc	0.5 A / 0 A	-13.20 V / -10.80 V

Specifications Acoustic Values

Acoustic Values

Table A-5 and Table A-6 list the acoustic values for the InfoTower cabinet.

Table A-5 Acoustic Values¹ (Declared Values per ISO 9296 and ISO 7779)

	Sound Po	wer Level	Sound Pro	essure Level
	L _{WAd} , B		L _{pAm} , dBA Bystander Positions	
	idle	Operate	ldle	Operate
SZ18Z-AA with 0 x RRD42	4.7	4.7	33	33
SZ18A-CA/3 with 4 x RRD42	4.7	4.8	33	33
SZ18A-DA/3 with 7 x RRD42	4.7	4.8	33	33

Table A-6 Schallemissionswerte¹ (Werteangaben nach iSO 9296 und ISO 7779/DIN EN27779)

	Schalleistungspegel L _{WAd} , B		Schalldruckpegel L _{PAm} , dBA		
			Zuschauerposition	ositionen	
	Leerlauf	Betrieb	Leeriauf	Betrieb	
SZ18Z-AA mit 0 x RRD42	4,7	4,7	33	33	
SZ18A-CA/3 mit 4 x RRD42	4,7	4,8	33	33	
SZ18A-DA/3 mit 7 x RRD42	4,7	4,8	33	33	

Current values for specific configurations are available from Digital representatives. 1 B = 10 dBA.

 $^{^1}$ Aktuelle Werte für spezielle Ausrüstungsstufen sind über die Digital Equipment Vertretungen erhältlich. 1 B = 10 dBA.

Related Documentation

Consult your Digital Sales representative for information on obtaining the documents listed in Table B-1.

Table B-1 Related Documents

Title	Order Number	
InfoServer System Operations Guide	AA-PJXJA-TE	
InfoServer 150 Installation and Owner's Guide	EK-INFSV-OM	
InfoServer 100 Installation and Owner's Guide	EK-DIS1K-IN	
RRD42 Disc Drive Owner's Manual	EK-RRD42-OM	4.4

	,	

Field Replaceable Units

Table C-1 lists the field replaceable units (FRUs) for the InfoTower.

Table C-1 InfoTower FRUs

Part Number	FRU Description		
12-30552-01	Terminator, SCSI		
17-02008-01	Cable assembly, SCSI 68 pin to 50 pin, 3 ft, BC56H-03		
30-40426-01	Stand		
70-30871-01	Drive mounting bracket assembly		
17-03714-01	Cable assembly, 50 cond., drive bracket, SCSI		
17-03712-01	Cable assembly, 4 cond., drive bracket, dc power		
SZ18Z-AF	InfoTower option (empty)		

Index

for InfoTower, A-4	input			
B	for InfoTower, A-2			
Bezels location of, 1-3 Cabinet See also Installation and Configurations components of, 1-3, 1-4 description of, 1-2	for InfoTower, A-3 Expander See also Cabinet See also Installation description of cabinet, 1-2 Exterior SCSI interface ports, 1-4 External devices connecting to the InfoTower, 2-13			
CD ROM configuring the drives, 3-1 inserting the drives, 3-2 removing the drives, 3-5 Configurations InfoServer 100 system, 2-6, 2-10	Fan location of, 1–4 Functional specifications for InfoTower, A–1			
D	1			
Desktop configuration See InfoServer 100 or 150 Drive See SCSI	InfoServer 100 configurations, 2-6 connections to InfoTower cabinet, 2-6 InfoServer 150 configurations, 2-10 connections to InfoTower cabinet, 2-10 InfoTower See also Cabinet See also Installation			

acoustic values, A-4 description of cabinet, 1-2 functional specifications, A-1	R
input electrical specifications, A-2 output electrical specifications, A-3 physical specifications, A-2 product features of, 1-1	Repairing See Troubleshooting
Installation	S
choosing the right location, 2-2 preparing for, 2-4 procedure, 2-1 to 2-16	SCSI connecting the SCSI cables for InfoServer 100, 2–6 InfoServer 150, 2–11
L	internally-mounted drives, location of,
Lock door lock and keys, location of, 1-3	1-3 SCSI connector, location of, 1-3 verifying drive access, 2-15 SCSI interface
P	internal, location of, 1-4
Physical specifications for InfoTower, A-2	SCSI interface ports exterior, location of, 1-4
Ports exterior SCSI interface, 1-4	Т
Positioning the InfoTower, 2-1 Power turning on power to the InfoServer system, 2-15 turning on power to the InfoTower, 2-15 Power supply unit	Tower configuration See InfoServer 100 or 150 Troubleshooting configuring the SCSI drives, 3-1 inserting the drives, 3-2
connecting the power cable, 2-5 location of, 1-4 power requirements for cabinet, 2-3 Problems	problems and solutions, 4-1 removing the drives, 3-5
	Verifying components, 2–3 drive access, 2–15

How to Order Additional Documentation

Technical Support

If you need help deciding which documentation best meets your needs, call 800-DIGITAL (800-344-4825) and press 2 for technical assistance.

Electronic Orders

If you wish to place an order through your account at the Electronic Store, dial 800-234-1998, using a modem set to 2400- or 9600-baud. You must be using a VT terminal or terminal emulator set at 8 bits, no parity. If you need assistance using the Electronic Store, call 800-DIGITAL (800-344-4825) and ask for an Electronic Store specialist.

Telephone and Direct Mail Orders

From	Call	Write	
U.S.A.	DECdirect Phone: 800-DIGITAL (800-344-4825) FAX: (603) 884-5597	Digital Equipment Corporation P.O. Box CS2008 Nashua, NH 03061	
Puerto Rico	Phone: (809) 781-0505 FAX: (809) 749-8377	Digital Equipment Caribbean, Inc. 3 Digital Plaza, 1st Street Suite 200 Metro Office Park San Juan, Puerto Rico 00920	
Canada	Phone: 800-267-6215 FAX: (613) 592-1946	Digital Equipment of Canada Ltd. 100 Herzberg Road Kanata, Ontario, Canada K2K 2A6 Attn: DECdirect Sales	
International		Local Digital subsidiary or approved distributor	
Internal Orders ¹ (for software documentation)	DTN: 241-3023 (508) 874-3023	Software Supply Business (SSB) Digital Equipment Corporation 1 Digital Drive Westminster, MA 01473	
Internal Orders (for hardware documentation)	DTN: 234-4325 (508) 351-4325 FAX: (508) 351-4467	Publishing & Circulation Services Digital Equipment Corporation NR02-2 444 Whitney Street Northboro, MA 01532	

¹Call to request an Internal Software Order Form (EN-01740-07).



Reader's Comments

InfoTower Installation and Operating Information EK-INFOE-OM. B01

Your comments and suggestions help us in	prove the on	ality of our	publications				
Thank you for your assistance.	which are de		r ====================================				
I rate this manual's:	Excellent	Good	Fair	Poor			
Accuracy (product works as manual says)			П	П			
Completeness (enough information)	ā						
Clarity (easy to understand)							
Organization (structure of subject matter)							
Figures (useful)							
Examples (useful)							
Index (ability to find topic)							
Page layout (easy to find information)							
I would like to see more/less							
What I like best about this manual is							
What I like least about this manual is _							
I found the following errors in this manual: Page Description							
Additional comments or suggestions to improve this manual:							
7				· · · · · · · · · · · · · · · · · · ·			
For software manuals, please indicate wh	ich version of	the softwar	e you are us:	ng:			
Name/Title		Dept.					
Company		-	Date				
Mailing Address							
MATERIAL COO		Phone					
		rnone					

Do Not Tear - Fold Here and Tape





No Postage Necessary If Mailed in the

BUSINESS REPLY MAIL

FIRST CLASS PERMIT NO. 33 MAYNARD MASS.

POSTAGE WILL BE PAID BY ADDRESSEE

DIGITAL EQUIPMENT CORPORATION
Document Quality
PK03-2/P33
129 Parker Street
Maynard, MA 01754-9975



Do Not Tear - Fold Here -



digital