## **SONY**®

# **AIT Library**

#### **Operating Instructions**

Before operating the unit, please read this manual thoroughly and retain it for future reference.

# StorStation LIB-81

#### INFORMATION

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

#### WARNING

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

#### Caution

The mains plug on this equipment must be used to disconnect mains power. Please ensure that the socket outlet is installed near the equipment and shall be easily accessible.

#### Notice

Use the power cord set approved by the appropriate testing organization for the specific countries where this unit is to be used.

#### WARNING

Before performing any installation or maintenance procedures, be sure that the library power switch is in the off position and that the power cord is disconnected from the library.

#### WARNING

The standalone library weighs around 13.5 kg. At least 2 people are needed to move or lift the library. Make sure you install the rack-mount library in the lowest possible location in the rack. For best results, use a rack with extension support legs.

#### INFORMATION

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

All interface cables used to connect peripherals must be shielded in order to comply with the limits for a digital device pursuant to Subpart B of Part 15 of FCC Rules.

#### If you have any questions about this product, please contact the Sony Support Center written on the warranty card.

	Declaration of Conformity
Trade Name:	SONY
Model No.:	LIB-81
Responsible Party:	Sony Electronics Inc.
Address:	16530 Via Esprillo San Diego, CA. 92127 U.S.A.
Telephone No.:	858-942-2230
(1) This device may no	ith Part 15 of the FCC Rules. Operation is subject to the following two conditions: t cause harmful interference, and cept any interference received, including interference that may cause undesired operation.

#### **ATTENTION**

According to the EU Directives related to product safety, EMC and R&TTE the manufacturer of this product is Sony Corporation, 1-7-1 Konan Minato-ku Tokyo, 108-0075 Japan. The Authorised Representative is Sony Deutschland GmbH, Hedelfinger Strasse 61,70327 Stuttgart, Germany. For any service or guarantee matters please refer to the addresses given in separate service or guarantee documents.

#### AUFMERKSAMKEIT

Im Sinne der EU Richtlinien bezüglich Produktsicherheit, EMV und R&TTE ist Sony Corporation, 1-7-1 Konan Minato-ku Tokyo, 108-0075 Japan der Hersteller dieses Produktes. Bevollmächtigter ist Sony Deutschland GmbH, Hedelfinger Strasse 61.D-70327 Stuttgart. Für Service oder Garantieangelegenheiten wenden Sie sich bitte an die in separaten Service oder Garantiedokumenten angegebenen Adressen.

#### European Union Restriction of Hazardous Substances Directive compliant.

#### Entspricht der Richtlinie der Europäischen Union zur Beschränkung der Verwendung gefährlicher Stoffe.

#### Für Kunden in Deutschland

Diese Ausrüstung erfüllt die Europäischen EMC-Bestimmungen für die Verwendung in folgender/ folgenden Umgebung(en): ·Wohngegenden ·Gewerbegebiete ·Leichtindustriegebiete (Diese Ausrüstung erfüllt die Bestimmungen der Norm EN55022, Klasse B.)

#### ACHTUNG

Zur Trennung vom Netz ist der Netzstecker aus der Steckdose zu ziehen, welche sich in der Nähe des Gerätes befinden muß und leicht zugänglich sein soll.

#### **HINWEISE**

- Maschinenlärminformations-Verordnung 3. GPSGV, der höchste Schalldruckpegel beträgt 70 dB(A) oder weniger gemäss EN ISO 7779.
- Die 3-adrige Geräteanschlußleitung muß Typ H05VV-F oder H05VVH2-F sein und nach DIN VDE 0625 geprüft sein. Der Stecker und die Gerätesteckdose müssen nach DIN VDE 0620 bzw DIN VDE 0625 geprüft sein. Der Leitungsquerschnitt kann 0,5 mm<sup>2</sup> betragen wenn die Anschlußleitung eine Länge von 2 m nicht überschreitet. Anderenfalls muß der Leitungsquerschnitt mindestens 0,75 mm<sup>2</sup> betragen.

#### **Operating environment**

Installatio Temperat		Horizontal 10 °C to 35 °C	
Relative		20% to 80% (no	condensation)
Ratings	Input Voltage	100 V - 240 V	
	Frequency	50 / 60 Hz	
	Current	AIT-5 Model AIT-4 Model AIT-3 Ex Model AIT-3 Model AIT-2 Model AIT-1 Model	55W (Max) 55W (Max) 55W (Max) 55W (Max) 50W (Max) 50W (Max)
Mass		approx. 13.5 kg	

#### Betriebsumgebung

Installation Temperatur		Horizontal 10 °C bis 35 °C
Relative Luftfeuchtigkeit		20% bis 80% (nicht kondensierend)
Elektrische Daten	Eingangsspannung Frequenz	100 V - 240 V 50 / 60 Hz
	Strom	Modell AIT-555W (max.)Modell AIT-455W (max.)Modell AIT-3Ex 55W (max.)Modell AIT-355W (max.)Modell AIT-250W (max.)Modell AIT-150W (max.)
Masse		ca. 13,5 kg

이 기기는 가정용으로 전자파 적합등록을 한 기기로서 주거지역에서는 물론 모든 지역에서 사용할 수 있습니다.

기기의 명칭 (모델명) : LIB-81 인증받은자의 상호 : SONY KOREA CORP. 제조년월일 : 별도표시 제조자/제조국가 : SONY CORPORATION/JAPAN

LED Notice:

This product is classified as a CLASS 1 LED PRODUCT. Bei diesem Laufwerk handelt es sich um ein LED-Produkt der Klasse 1. The LED of the barcode reader incorporated inside this

product complies with IEC 60825-1.

LED (barcode reader) Wavelength: 630-660 nm

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# Introduction Chapter

## **Overview**

The LIB-81 is an AIT (Advanced Intelligent Tape) library with a built-in AIT drive. Up to 8 cartridges can be set and used. The unit can also be connected to, and used with, a workstation or server.

#### Up to 8 cartridges can be set

Up to 8 AIT cartridges can be set. Cartridges can be replaced from the front panel. When the AIT library is equipped with a bar code reader, bar code labels can be used to manage cartridges. The following types of cartridges can be used in this library:

#### LIB-81/A5 models

- AIT-5 cartridge: can record up to 3200 GB of data
- AIT-4 cartridge: can record up to 1600 GB of data
- AIT-3 Ex cartridge: can record up to 1200 GB of data
- AIT-3 cartridge: can record up to 800 GB of data

#### LIB-81/A4 models

- AIT-4 cartridge: can record up to 1600 GB of data
- AIT-3 Ex cartridge: can record up to 1200 GB of data

#### LIB-81/A3X models

- AIT-3 Ex cartridge: can record up to 1200 GB of data
- AIT-3 cartridge: can record up to 800 GB of data
- AIT-2 Turbo cartridge: can record up to 640 GB of data

#### LIB-81/A3 models

- AIT-3 cartridge: can record up to 800 GB of data
- AIT-2 cartridge: can record up to 400 GB of data
- AIT-1 cartridge: can record up to 280 GB of data

#### LIB-81/A2 models

- AIT-2 cartridge: can record up to 400 GB of data
- AIT-1 cartridge: can record up to 280 GB of data

#### LIB-81/A1 models

• AIT-1 cartridge: can record up to 280 GB of data

Notes

- Cartridges that can be used vary according to the type of built-in drive.
- The memory capacity mentioned above assumes the use of all 8 AIT cartridges, no compression.
- For combinations other than those mentioned above, refer to the attached sheet.

#### The AIT library can be remotely controlled

A browser can be used to configure individual settings. It can also be used to view library and maintenance information.

#### LVD SCSI compliant

The LIB-81/A5, LIB-81/A4, LIB-81/A3X, and LIB-81/A3 models are Ultra 160 LVD SCSI-compliant, whereas the LIB-81/A2 and LIB-81/A1 models are Wide Ultra LVD SCSI-compliant.

#### Suitable for rack mounting

With the ACY-RK81 rack mounting kit (sold separately), the AIT library can be installed on an EIA-standard, universal pitch 19-inch rack. Contact your dealer for information about the rack mounting kit.

## **Product Features and Functions**



#### **1** Front Panel

There are two shapes for the front panel.

#### **2** Power Indicator LED

This LED light is on when the power is turned on.

#### **3** Cartridge Dock

Load and exchange cartridges in the cartridge dock. When the cartridge dock is specified using the control buttons, its shutter opens automatically. The library does not operate while the cartridge dock shutter is open, so close the shutter using the control buttons after loading or exchanging cartridges.

#### **4** Liquid Crystal Display

The LCD panel displays information such as the operating status. When in normal standby state, it displays the status of the AIT library.

#### **5** Control Buttons

These buttons are used to control operations through the Control Panel Menu.

#### 6 Error LED

Rear

This LED light is on when an error occurs.

#### **7** Ventilation Holes

Please be careful not to block the ventilation holes. If the ventilation holes are blocked, the AIT library may overheat, resulting in fire or other damage.



#### **1** Power Supply Connector

Plug the provided power cord into this connector.

#### **2** Power Switch

Press this switch to turn the library on and off.

#### **3** Fan Unit

Please be careful not to block the ventilation holes. If the ventilation holes are blocked, the AIT library may overheat, resulting in fire or other damage.

#### 4 Transport Screw

During installation, remove the transport screw and set it in the bottom hole (Operation position). Before transport, make sure that you read "Transporting the AIT Library" (page 93) in the "Appendix" chapter, and make sure that the transport screw is in the upper hole (Shipping position).

#### **5** SCSI connector 1 **6** SCSI connector 2

For information about connecting the SCSI connectors, refer to "Connecting to the Host Computer" (page 17) and "Connecting SCSI Peripheral Devices" (page 19) in Chapter 2, "Installation".

#### 7 LAN Connector

Connect a 10Base-T/100Base-TX network cable here.

#### Bottom

#### **DIP Switches for Setup**

The default setting of the DIP switches is as follows. Use the DIP switches as is.



For details, refer to "Setting the DIP Switches" (page 18) in Chapter 2, "Installation".

## **System Structure**

Generally, the library is connected to the host computer and used to control the library from the host computer. Also, you can connect the library to the network so that it can be configured and maintained through a browser.



#### Notes

- A SCSI host adapter card must be installed in the host computer.
- In order to configure and maintain the library through a browser, browser software must be installed in the computer. The following operating systems and browsers are compatible with the library.

Operating systems:

- Microsoft Windows 95, Microsoft Windows 98, Microsoft Windows Me, and Microsoft Windows 2000
- Browsers:
- Microsoft Internet Explorer 5.01 or later
- Netscape Communicator 4.7 or later

## **Compatible Data Cartridges**

This section describes data cartridges used in the AIT library.

#### **AIT Cartridges**

AIT cartridges for use with your built-in AIT drive can be used in the AIT library. To achieve the maximum transfer rate and recording capacity, use the optimum cartridges for your type of AIT drive. For information on recording capacities, refer to "Hardware Specifications" (page 94) in the "Appendix" chapter.



#### Built-in AIT-1 drive (LIB-81/A1 models)

Advanced Intelligent Tape

AIT-1 mark

#### Caution

- Do not use 8 mm video tapes sold at stores. An 8 mm video tape looks a lot like an AIT cartridge, but has different specifications. Do not use any cartridge other than those listed above. Use only designated AIT data cartridges.
- For combinations other than those mentioned above, refer to the attached sheet.

#### **Cleaning Cartridges**

To clean the AIT drive, use an AIT Cleaning cartridge. There are four types of cleaning cartridges: the SDX5-CL for use with AIT-5 drives; SDX4-CL or SDX4-CLL for use with AIT-4 drives; SDX3X-CL for use with AIT-3 Ex drives; and SDX1-CL for use with AIT-3, AIT-2, and AIT-1 drives. Make sure that you use the cleaning cartridge appropriate for your drive. For information on cleaning, refer to "Cleaning the AIT Drive" (page 63) in Chapter 5, "Operating the AIT Drive".

## Software

For guidance on application software that can be used with the AIT library and supported operating systems, contact your dealer.

## **Precautions**

- In the cartridge slots, use the optimum cartridges for your type of AIT drive. Using cartridges other than AIT cartridges may cause malfunctions. For information about cartridges that can be used with the AIT library, refer to "Compatible Data Cartridges" (page 11).
- Do not insert anything except AIT cartridges in the cartridge dock, as doing so may result in damage.
- If the unit is suddenly taken from a cold to a warm location, or if ambient temperature suddenly rises, moisture may form on the outer surface and/or inside of the unit. This is known as condensation. If condensation occurs, put the unit aside without turning it on and wait until the condensation clears. Do not use the unit in such a state, as this may damage it.

# Installation Chapter

## **Overview**

This chapter explains general procedures for positioning the AIT library, connecting it to the host computer and turning on the library power. This chapter also explains initial setup. Installation and setup steps may vary depending on your system.

After turning on the power, make settings required to use the unit as explained in "Initial Setup" (page 22).

## Unpacking

#### Note

You will need the box, packing materials and transport screw if you wish to move or transport the AIT library in the future. Retain them for future use.

Remove the AIT library from the box as indicated on the box.

Remove the packing materials, such as plastic covers and tapes.

**2** Remove the transport screw (turn counterclockwise) from the Shipping position (upper hole) at the rear of the library, and then set it in the Operation position (lower hole) with a screw driver or coin.



## **Checking the Package Contents**

After opening the package, make sure all of the following items are present. Contact your dealer if anything is missing.

- LIB-81 AIT Library (1)
- Power cable (1)
- SCSI terminator (1)
- Quick Start Guide (1)
- Air Filter (ACY-FL81) (4)
- Bar code labels (1 sheet; only supplied with models equipped with a bar code reader)
- Safety Notice (1)

#### Note

In addition to the above, other documentation, cables, and cleaning cartridges may also be included.

## **Preparing the Host Computer**

To prepare the host computer before installing the AIT library:

- Make sure that a SCSI host adapter card is installed in the host computer.
- **2** Install the application software supporting the library on the host computer.

For guidance on application software that can be used with the AIT library and supported operating systems, contact your dealer.

## **Installing the AIT Library**

The library weighs about 13.5 kg (29.8 lb.) and has the following dimensions. Before installing the library, make sure that the surface on which you are placing it is large and strong enough.



Also, set the library horizontally so that its front and sides are inclined by no more than  $\pm 1$  degree in any direction.









With the ACY-RK81 rack mounting kit (sold separately), the AIT library can be installed on an EIA-standard, universal pitch 19-inch rack. Contact your dealer for information about the rack mounting kit.

#### Note

Install the AIT library on a horizontal surface near an AC power outlet. Also, leave a gap of about 150 mm (5.9 in.) behind the rear of the unit to allow air to circulate.



## **Connecting the Power Cable**

1 Confirm that the power switch on the rear of the AIT library is turned off (O is pressed).



2 Connect one end of the power cable to the power supply connector and the other end to the power outlet.



## **Connecting to the Host Computer**

Connect the AIT library and the host computer with a SCSI cable. This section explains general connecting steps. Connect the library with the appropriate SCSI cable, depending on the AIT drive.

- When the library is equipped with the AIT-5, AIT-4, AIT-3 Ex, or AIT-3 drive, use a generic Ultra 160 cable.
- When the library is equipped with the AIT-2 or AIT-1 drive, use a generic Wide Ultra LVD SCSI cable that conforms to SCSI-3.

The library side uses the 68-pin half pitch connector.

When connecting other SCSI devices together with the AIT library, see "Connecting SCSI Peripheral Devices" (page 19).

#### Caution

- Do not connect the AIT library to an HVD (High Voltage Differential) SCSI bus. If connected, the library or other devices on the SCSI bus may be damaged.
- When connecting the SCSI cable, turn off all of the connecting devices, including the AIT library and the host computer.
- When connecting the AIT library as the last device on the SCSI bus, be sure to attach the provided terminator.
- In LVD (Low Voltage Differential) SCSI, make the total length of the SCSI cable (internal and external), which connects the host computer and the device at the end of the SCSI bus, shorter than 12 meters (39 ft. 4.4 in). (The length of the AIT library internal cable is 2 meters (78.7 in.).)
- SCSI cables cannot be branched.

#### Notes

- For information about the SCSI bus, refer to "SCSI Specifications" (page 96) in the "Appendix" chapter.
- Prepare the necessary SCSI cables. For information about SCSI cable specifications, refer to "SCSI Cable and Terminator Specifications" (page 96) in the "Appendix" chapter.
- **1** Confirm that the host computer and AIT library are turned off.
- **2** Attach the SCSI cable and terminator as shown in the figure below.
  - **1** Use a SCSI cable (sold in stores) to connect the AIT library to the host computer.

**2** Attach the provided terminator to the other connector.



## **Setting the DIP Switches**

DIP switch settings determine whether electric power is supplied to the SCSI terminator (when multiple SCSI devices are connected).



The default factory setting of the DIP switches is as follows.



- 1-7: On (Do not change this default setting.) Used for expansion purposes
- 8: On

ON: SCSI TERM POWER ON OFF: SCSI TERM POWER OFF

To set the DIP switches:

- **1** Press the power switch to turn off the power.
- **2** Use a pointed object such as a machinist's screwdriver to change the settings of the DIP switches.
- **3** Press the power switch to turn on the power.

## **Connecting SCSI Peripheral Devices**

SCSI peripheral devices can be connected to the SCSI connectors of the AIT library. The SCSI configuration of the library is as shown below. Connect the devices according to the system environment.



#### Notes

- The default factory settings of the SCSI IDs are as follows.
  - Library:
  - AIT Drive: 1
- Do not use repetitive SCSI IDs.

0

## **Turning the Power On/Off**

**Turn the Power On** 

Turn on the AIT library power, then turn on the host computer power.

Press the power switch on the rear of the library.



The messages on the right appears and the startup process begins. (Startup takes several minutes.)

\_\_\_\_\_

Initializing

LIB-81

When the startup process ends, the library enters the time setting mode.

#### Caution

## Models equipped with a bar code reader

By default, the library is not set to read bar codes. If you modify this setting so that the library can read bar codes and use cartridges without bar code labels, initialization after turning on the library takes unusually long. For details about how to set the library to read bar codes, see Chapter 3, "Basic Usage" (page 34).

Models without a bar code reader Modifying the default setting so that the library can read bar codes generates an error. You should not modify this setting.

**2** If you want to change the date and time, press the [ENTER] button. If you do not want to make changes, press the [CANCEL] button.

For details about the date and time settings, see "Setting the Date and Time" (page 22).

Once the library is started, the status display on the right appears.

READY	1	2	3	4
AIT3	5	6	7	8

#### Jan/01/2001 12:00:00 [ENTER] to set the Date and Time [CANCEL] to exit

#### Notes

- The date and time cannot be updated when the AIT library is off. For this reason we recommend that you set the date and time each time you turn on the library.
- If the library is left idle for five minutes, the status display appears automatically.
- **3** After pressing the standby switch on the library's front panel, wait at least 10 seconds before turning on the host computer.

When using DHCP, wait at least 30 seconds.

Then, go to "Initial Setup" (page 22).

#### Notes

1

- If you start the host computer before the library, the SCSI ID is not detected correctly. Therefore, always start the library before starting the host computer.
- If the library does not work as above, refer to "Troubleshooting" (page 92).

Turn the Power Off

Before turning off the library, perform the system shutdown procedure from the control panel. After you have performed the procedure, you can turn off the library.

At the status display, press the [MENU] button for two seconds.

2	Use the $\bigvee$ and $\blacktriangle$ buttons to select "9. System Down," then press the [ENTER] button.	Menu 12:34 7.Tape Inventory 8.Password 9.System Down
3	Select "2. Shutdown," then press the [ENTER] button.	System Down 12:34 1.Reset 2.Shutdown
4	When "[ENTER] to activate" appears, press the [ENTER] button.	Shutdown
	The system performs the shutdown procedure.	[ENTER] to activate Shutdown *** Wait a minute ***
5	When the message on the right appears, turn off the library by pressing the power switch on the rear.	Ready for shutdown Press the power switch on the rear of the Library

#### Caution

• Even though pressing the rear power switch can turn off the library power, following the above steps is recommended.

- After turning the AIT library power off, wait at least 10 seconds before turning it on again.
- Before transport make sure that you turn off the AIT library using the procedure above, and that the transport screw is in the Shipping position.

#### Note

To avoid pressing the control buttons by accident, you can disable the control buttons. For information on how to disable the switch, refer to "Disabling the Buttons on the Front Panel" (page 47).

## **Initial Setup**

Once the library has started, perform the initial setup as follows:

- Set the date and time. (page 22)
- 2 Set the SCSI IDs of the AIT library and AIT drives if necessary. (page 23)
- **3** Set the cartridges. (page 25)
- **4** Configure the application programs on the host computer for use with the unit.

Follow the instructions given in the application software manual to set up the software for the library.

**5** Connect to a network if necessary. (page 29)

#### Setting the Date and Time

Use the Configuration Menu of the control panel to set the date and time.

#### Notes

- The date and time can also be set through a browser.
- The date and time cannot be updated when the AIT library is off.
- At the status display, press the [MENU] button for two seconds.
- 2 Use the  $\bigvee$  and  $\blacktriangle$  buttons to select "5.Configuration", then press the [ENTER] button.
- **3** Select "1.Date & Time", then press the [ENTER] button.

Date and Time appears.

Configuration

1.Date & Time 2.Warning 3.Barcode 12:34

4 Set the month, day, and year. **1** When the month digits flash, use the  $\mathbf{\nabla}$  and  $\mathbf{\Delta}$  buttons to set the month, then press the [ENTER] button. **2** When the day digits flash, use the  $\mathbf{\nabla}$  and  $\mathbf{\Delta}$  buttons to set the day, then press the [ENTER] button. **3** When the year digits flash, use the  $\nabla$  and  $\triangle$  buttons to set the year then press the [ENTER] button. 5 Set the hour, minute, and second. **1** When the hour digits flash, use the  $\nabla$  and  $\triangle$  buttons to set the hour, then press the [ENTER] button. **2** When the minute digits flash, use the  $\mathbf{\nabla}$  and  $\mathbf{\Delta}$  buttons to set the minute, then press the [ENTER] button. **3** When the second digits flash, use the  $\nabla$  and  $\triangle$  buttons to set the second then press the [ENTER] button. 6 When the country flashes, use the  $\nabla$  and  $\blacktriangle$  buttons to set the country, then press the [ENTER] button. 7 When "[ENTER] to activate" Jan/01/2001 12:00:00 appears, press the [ENTER] button. Japan 9:00) (GMT+ [ENTER] to activate The date and time and the country are now set. The display returns to the menu. 8 Press the [CANCEL] button twice to return to the status display.

#### Setting the SCSI ID

Use the SCSI Menu of the control panel to set the SCSI IDs and SCSI parity of the AIT library and AIT drives.



#### About SCSI ID

For each SCSI bus, a unique SCSI ID must be set for the AIT library and AIT drives. The default factory settings of SCSI IDs are as follows:

- Library:
- AIT Drive: 1

0

#### About SCSI parity

When the SCSI parity function is enabled, parity checks are performed on all data passing through the SCSI bus. The factory default settings for SCSI parity are as follows:

- Library: Enabled (YES)
- AIT Drive: Enabled (YES)

#### Caution

Do not duplicate SCSI IDs.

#### Note

The SCSI IDs can also be set through a browser.

- 1 At the status display, press the [MENU] button for two seconds.
- **2** Use the  $\checkmark$  and  $\blacktriangle$  buttons to select "4.SCSI", then press the [ENTER] button.
- **3** Set the SCSI ID and SCSI parity of the library.

	ID	Parity
Library	01	YES
Drive	02	NO

- 1 When the "ID" of "Library" setting flashes, use the ▼ and ▲ buttons to set the SCSI ID, then press the [ENTER] button.
- 2 When the "Parity" setting flashes, use the ▼ and ▲ buttons to set the SCSI parity, then press the [ENTER] button. Select "YES" to enable the SCSI parity function.
- 4 In the same manner, set the AIT Drive.
- **5** When "[ENTER] to activate" appears, press the [ENTER] button.

	ID	Parity
Library	01	YES
Drive	02	NO
[ENTER]	to	activate

**6** When "[Enter] to reset" appears, press the [ENTER] button.

The system reboots.

Warning 12:34 Reboot the system to activate the setting [ENTER] to reset

#### Caution

If you change the SCSI ID while the library is connected to the host computer, you must also restart the host computer.

#### **Setting the Cartridges**

#### **Preparing the Cartridge**

Prepare a cartridge and set it into the AIT library.

Check the erase-protection tab and prepare your cartridge for use. If you are using a model equipped with a bar code reader, you can manage cartridges with bar code labels. Affix bar code labels to your cartridges as necessary. If you are using a model without a bar code reader, proceed to step 2.

#### Note

The type of bar code is fixed to Code 39 with check digit for models equipped with a bar code reader. We recommend that you use Sony bar code labels for the AIT library (sold separately). If you use other types of bar code labels, you may encounter recognition problems. For details about Sony bar code labels, see "Optional Accessories (sold separately)" (page 96).

Affix bar code labels as necessary.

Affix the barcode label in the position shown in the figure, orienting it so that the numbers are at the top.



#### Caution

#### Models equipped with a bar code reader

By default, the library is not set to read bar codes. If you modify this setting so that the library can read bar codes and use cartridges without bar code labels, initialization after turning on the library becomes unusually long. For details about how to set the library to read bar codes, see Chapter 3, "Basic Usage" (page 34).

#### Models without a bar code reader

Modifying the default setting so that the library can read bar codes generates an error. You should not modify this setting.

**2** Check whether the erase-protection tab is set to the write-enable position.

If the tab is orange, data can be written to the cartridge.

AIT-5, AIT-4, AIT-3 Ex, AIT-3, AIT-2 Turbo, AIT-2, AIT-1 Turbo, AIT-E Turbo



#### Setting the Cartridge

Set the cartridge into the AIT library. When setting the cartridge, specify the slot by its element address. For information about element addresses, refer to "Assigned Element Addresses" (page 48) in Chapter 3, "Basic Usage".

- 1 At the status display, press the [MENU] button for two seconds.
- 2 Use the ▼ and ▲ buttons to select "2.Eject/Insert", then press the [ENTER] button.

Insert

Slot

"Eject/Insert" appears.

AIT-1

**3** Select "3.Insert Into Library", then press the [ENTER] button.

Eject/Insert 12:34 1.Eject From Library 2.Eject From Drive 3.Insert Into Library

- **4** Select the cartridge insertion method, then press the [ENTER] button.
  - When you want to specify a slot and insert the cartridge in it, select "1. Single Mode".
  - When you want to insert several cartridges consecutively, select "2. Multiple Mode". In this case, you only need to specify the first slot.
- 5 Use the ▼ and ▲ buttons to set the element address of the slot where the cartridge is going to be set, then press the [ENTER] button.

1.Single Mode 2.Multiple Mode

01

12:34



**8** If you selected "1. Single Mode" in step 4, press the [CANCEL] button.

#### Slot 01 Insert Tape [CANCEL] to exit

#### Note

Even if you selected "1. Single Mode" in step 4, you can insert a different cartridge by using the ▼ and ▲ buttons to select the slot element address, and then pressing the [ENTER] button. Because you did not select "2. Multiple Mode" in step 4, the cartridge dock shutter closes and reopens. When it does, you can insert another cartridge as explained above. If you do so, when you are done inserting cartridges press the [CANCEL] button and proceed to step 10.

**9** If you selected "2. Multiple Mode" in step 4, perform the following depending on the number of open slots.

#### Two or more open slots

The slot moves to the next one. When it stops, insert another cartridge and press the [ENTER] button again. Repeat until all the cartridges are inserted, then press the [CANCEL] button.

**1** Insert a cartridge and press the [ENTER] button.

**2** The slot moves to the next. Insert another cartridge in the same manner and press the [ENTER] button.

When you press the [ENTER] button, the slot moves to the next.

**3** Repeat until all the cartridges are inserted, and then press the [CANCEL] button.

#### Only one open slot

The element address of the front slot appears on the first line. (Nothing appears on the second line.)

**1** Insert a cartridge and press the [CANCEL] button.

Insert Tape Slot 01 Next Slot 02 [CANCEL] to exit [ENTER] to next slot

Insert Tape Slot 01 [CANCEL] to exit

#### Caution

Do not put your fingers in the slot when it is moving, as this could result in injuries.

**10** When "[ENTER] to activate" appears, press the [ENTER] button.

If you selected "1. Single Mode" in step 4, the display on the right appears.	Slot 01 Exit ? [ENTER] to activate
If you selected "2. Multiple Mode" in step 4, the display on the right appears.	Insert Tape Slot 01 Exit ? [ENTER] to activate
The shutter closes and the initialization is performed.	Slot 01 Initializing

**11** When the initialization ends, press the [CANCEL] button three times to return to the status display.

#### **Connecting to the Network**

If the AIT library is connected to the network, a browser can be used to configure the library and view status information.

Connect the AIT library to the network as follows.

- **1** Setup the network.
- **2** Connect a network cable.
- **3** Restart the library.
- **4** Access the library from a browser.

#### Notes

- For information about how to use the browser to configure individual settings and view status information, refer to Chapter 6, "Library Administration Menu" (page 67).
- In order to configure and maintain the library through a browser, browser software must be installed in the computer. The following operating systems and browsers are compatible with the library. Operating systems:
  - Microsoft Windows 95, Microsoft Windows 98, Microsoft Windows Me, and Microsoft Windows 2000
  - Browsers:
  - Microsoft Internet Explorer 5.01 or later
  - Netscape Communicator 4.7 or later

#### Setting the Network

In order to connect to the network, use the Network Menu of the control panel to configure the necessary settings, such as the IP address setting.

#### Notes

- After connecting to the network, a browser can be used to change network settings.
- The AIT library does not support DNS. (You do not need to set the [Host], [Domain], or [DNS] settings in the procedure below.)
- You can obtain the AIT library's MAC address from the Network Menu.
- 1 At the status display, press the [MENU] button for two seconds.
- 2 Use the ▼ and ▲ buttons to select "6.Network", then press the [ENTER] button.

"Network" appears.

- **3** When you want to set the host name, select "1.Host", then press the [ENTER] button. (However, the AIT library does not support DNS, therefore this setting is unnecessary.)
- **4** When the "Host" setting flashes, set the host name. (However, the AIT library does not support DNS, therefore this setting is unnecessary.)

Menu	12:34
4.SCSI	
5.Configuration	
6.Network	

Network 12:34 1.Host 2.Domain 3.IP Address

Host		

If no setting has been made, a flashing rectangle appears.

- In order to change the host name, use the ▼ button, the ▲ button, the [ENTER] button and the [CANCEL] button to enter the new host name, then press the [ENTER] button. First, make sure that the same host name does not exist in the same network, then enter the host name.
  - Enter the host name up to 63 alphanumeric characters and symbols ( . ).
  - To delete a character, use space (" ").
- **5** When [[ENTER] to activate] appears, press the [ENTER] button.

Host LIB-81 [ENTER] to activate

The display returns to "Network".

- **6** When you want to set the domain name, select "2.Domain", then press the [ENTER] button. (However, the AIT library does not support DNS, therefore this setting is unnecessary.)
- 7 When the "Domain" setting flashes, set the domain name.

If no setting has been made, a flashing rectangle appears.

- In order to change the domain name, use the ▼ button, the ▲ button, the [ENTER] button and the [CANCEL] button to enter the new domain name, then press the [ENTER] button.
  - Enter the domain name up to 63 alphanumeric characters and symbols (-.).
  - To delete a character, use space (" ").

**8** When [[ENTER] to activate] appears, press the [ENTER] button.

Domain XXX [ENTER] to activate

The display returns to "Network".

- **9** When you want to set the IP address, select "3.IP Address", then press the [ENTER] button.
  - Select "YES" to use the IP address assigned to the DHCP server. Then proceed to step 12.
  - Select "NO" to use the fixed IP address. Then proceed to step 10.
- 10 When the "IP" setting flashes, use the ▼ button, the ▲ button, the [ENTER] button and the [CANCEL] button to set the IP Address, then press the [ENTER] button.
- 11 When the "Mask" setting flashes, use the ▼ button, the ▲ button, the [ENTER] button and the [CANCEL] button to set the subnet mask, then press the [ENTER] button.
- **12** When [[ENTER] to activate] appears, press the [ENTER] button.

DHCP	
IP	000.000.000.000
Mask	000.000.000.000
[ENT	000.000.000.000 ER] to activate

The display returns to "Network".

- **13** When you want to set the default gateway, select "5.Gateway", then press the [ENTER] button. (However, the AIT library does not support the default gateway setting.)
- 14 When the "Gateway" setting flashes, use the ▼ button, the ▲ button, the [ENTER] button and the [CANCEL] button to set the IP address for the default gateway, then press the [ENTER] button.
- **15** When [[ENTER] to activate] appears, press the [ENTER] button.

Gateway 000.000.000.000 [ENTER] to activate

The display returns to "Network".

**16** When you want to obtain the MAC address, select "6.MAC Information", then press the [ENTER] button.

The MAC address is displayed.

MAC Address 00-00-00-00-00-00-00

**17** Press the [CANCEL] button twice to return to the status display.

**18** Use the **▼** and **▲** buttons to select "9. System Down", then press the [ENTER] button.

Menu 12:34 7.Tape Inventory 8.Password 9.System Down

<b>19</b> Select "2. Shutdown", then press the [ENTER] button.	System Down 12:34 1.Reset 2.Shutdown
<b>20</b> When "[ENTER] to activate" appears, press the [ENTER] button.	Shutdown
	[ENTER] to activate
The system performs the shutdown procedure	Shutdown *** Wait a minute ***
<b>21</b> When the message on the right appears, turn off the library by pressing the power switch on the rear.	Ready for shutdown Press the power switch on the rear of the Library

#### **Connecting a Network Cable**

When the network settings are done and the library turned off, connect the network cable.

1 Connect a network cable from the hub to the Ethernet connector on the library.



**2** Turn on the library power.

#### Accessing the AIT Library From a Browser

Use a browser to check whether the library is connected to the network.

- 1 Launch a browser on a client computer.
- 2 Enter "http://XXX.XXX.XXX/" in the "Address" or "Location" field.

For "XXX.XXX.XXX.XXX", enter the IP address set in the library. (e.g., 192.168.0.1)

#### Note

If the IP address assigned by a DHCP server is being used, enter the current IP address in the "Address" field of the browser. The current IP address can be checked with [IP Address] of the Network Menu of the control panel.

The top page of the Library Administration Menu appears.

#### \_ 🗆 🗙 Sony Library A enu - Mici oft Internet Ex \_ Ben gott yew Favorites to the first one there is the second structure capacity ] ← Beck yew Favorites (20 Help ) ] ← Beck + → - ② ② ③ ③ ③ ③ ③ ③ ③ ③ Search ⓐ Favorites ③ Helpsty | ⑤ + ④ W + □ Address ● http://192.166.0.1/ ▼ 🖓 Go 🛛 Links » English Japanese STORSTATION System Configuration Configura. Network SCSI ID Password (Freeman () D Library Administration Menu Informatio Inventory Maintenance Information All right reserved by Sony Corporation 🔹 🖉 Internet 🛃 Done

#### (Example) When using Microsoft Internet Explorer

# Basic Usage Chapter

## **Overview**

This chapter explains the control panel, basic settings, handling the cartridges, element addresses assignments and daily maintenance.

## **Control Panel**

The control panel can be used to configure the AIT library settings, the AIT drive settings and the network settings. It can also be used to display individual information about the AIT library.

This section explains operation of the control panel, the control buttons and menu items.

For details on the menu and how to configure the settings, see each related reference.

#### Caution

This document contains explanations for all LIB-81 models (A5, A4, A3X, A3, A2, and A1). We have used LIB-81/A3 displays to illustrate the explanations. The display of models other than the LIB-81/A3 differs slightly, but operation is similar to the LIB-81/A3.

#### **Usage of the Control Panel**

The following tasks can be accomplished using the control panel:

- Configure AIT library and AIT drive-related settings
- · Configure network related settings
- Display information related to the AIT library
- Test hardware

#### Note

Some of the setups and operations can be performed through a browser. Refer to Chapter 6, "Library Administration Menu" (page 67).

#### Viewing the Status Display

During the normal active state, the status information is displayed on the LCD panel of the AIT library.



#### **1** Current operation of the library and AIT drive

The meanings of the messages displayed for the AIT library are: "READY": Waiting

"MOVE": The cartridge is moving

"PUT": The cartridge is being set into the AIT drive or slot

The meanings of the messages displayed for the AIT drive are:

"WRITE":	The AIT drive is writing data
"READ":	The AIT drive is reading data
"ERASE":	The AIT drive is erasing data
"SPACE":	The AIT drive is reorganizing data
"RWND":	The AIT drive is rewinding the cartridge
"CLEAN":	The AIT drive is cleaning the drum head

- "LOAD": The AIT drive is being loaded
- "UNLD": The AIT drive is being unloaded

#### Caution

There may be a lag between the actual operational status of the drive and the information on the LCD panel.

#### **2** Type of AIT drive

The type of AIT drive appears at the bottom left of the display. When setting cartridges, check this display and make sure the cartridges are of the same type.

#### **3** Position of cartridges set in slots

If cartridges are set in the AIT library slots, the numbers of the corresponding slots are displayed in reverse video.

#### **4** Position of cartridges set in the AIT drive

If a cartridge is present inside the AIT drive or its cartridge slot, **L** is displayed.

If a cartridge is not present inside the AIT drive or its cartridge slot, **L** is displayed.

#### (Example) If cartridges are set in slots 1 and 8, and AIT Drive



#### 5 Picker

The picker is displayed as  $\mathbf{\nabla}$ .

When the picker has picked up and is conveying a cartridge, **i** is displayed.

#### Note

The status information can be viewed through a browser. Refer to Chapter 6, "Library Administration Menu" (page 67).

#### Menu Items

The following menus are in the control panel.



#### **Information Menu**

The AIT library and AIT drive information can be displayed.

The following submenus are in the Information Menu.



• Library Menu

Displays information related to the AIT library.

 $\rightarrow$  "Viewing Information Related to the AIT Library" (page 59) in Chapter 4, "Operating the AIT Library".

- Drive Menu
  - Displays information related to the AIT drives.

 $\rightarrow$  "Viewing Information Related to the AIT Drive" (page 62) in Chapter 5, "Operating the AIT Drive".
#### **Eject/Insert Menu**

Use this menu to set and replace the cartridges.

 $\rightarrow$  "Replacing the Cartridges" (page 53) in Chapter 4, "Operating the AIT Library".

The following submenus are in the Eject/Insert Menu.



The date and time, warning message displayed, bar code, R-MIC and brightness of the LCD panel can be configured.

 $\rightarrow$  "Basic Settings" (page 43) of this chapter.

The following submenus are in the Configuration Menu.



• "Date & Time"

Set the date and time.

• "Warning"

Set whether or not to display the life warning (given when a specific part has been operated more times than the specified number of times).

• "Barcode"

If you are using a model equipped with a bar code reader, configure so that the bar codes affixed to cartridges can be read.

• "R-MIC"

If you are using a model equipped with an R-MIC reader, only enable the R-MIC function if you use AIT-5, AIT-4, AIT-3 Ex, or AIT-3 cartridges, or AIT cartridges with R-MIC.

- "LCD Contrast"
  - Set the brightness of the LCD panel.
- "Sequential Mode" Activate the sequential mode.

#### Caution

There exist LIB-81 AIT library models without bar code or R-MIC readers. Make sure that your library is equipped with a bar code and/or R-MIC reader before modifying the "Barcode" or "R-MIC" setting. Modifying these settings when using LIB-81 AIT library models that are not equipped with the appropriate readers generates errors.

Necessary settings can be configured in order to connect to the network.  $\rightarrow$  "Connecting to the Network" (page 29) in Chapter 2, "Installation".

#### **Tape Inventory Menu**

Information related to the cartridges can be displayed.  $\rightarrow$  "Viewing Cartridge Information" (page 60) in Chapter 4, "Operating the AIT Library".

The following submenus are in the Tape Inventory Menu.



## **Control Buttons**

The following buttons are on the control panel. Use these buttons to operate the Control Panel Menu.

#### [MENU] button

The Control Panel Menu appears.

#### ▲ button, ▼ button

These buttons are used to select a menu and to input letters and numbers.

• Press  $\blacktriangle$  to move to the previous menu, and  $\triangledown$  to move to the next menu.

• Press ▲ to cycle forward through letters and numbers one at a time, and ▼ to cycle backwards.

#### [ENTER] button

This button is used to finalize the displayed menu or value, set alphanumerical characters, and perform operations.

- Finalizes or executes the displayed menu or operation.
- Moves the cursor right.
- Saves the values.
- Input a space ("") to delete unwanted character.

#### [CANCEL] button

Used to cancel the current operation and set alphanumerical characters.

- Returns to the previous menu.
- Moves the cursor left.

#### (Operation example) Set the host name

- 1 When the server is in the normal standby state, press the [MENU] button for two seconds.
- 2 Use the **▼** and **▲** buttons to select "6.Network", then press the [ENTER] button.
- Menu 12:34 4.SCSI 5.Configuration 6.Network

"Network" appears.

**3** Select "1.Host", then press the [ENTER] button.

Network 12:34 1.Host 2.Domain 3.IP Address

"Host" appears, and the first character of the host name flashes.

Host LIB-81

4 Use the  $\checkmark$  and  $\blacktriangle$  buttons to input the first character.

- **5** Press the [ENTER] button to flash the next character, then input the character.
- 6 Repeat Step 5 to input the rest of the characters.

Host MACHINE-NAME

- **7** Press the [ENTER] button.
- **8** When [[ENTER] to activate] appears, press the [ENTER] button.

Host name is now set, and the

display returns to "Network".

MACHINE\_NAME [ENTER] to activate

**9** Press the [CANCEL] button twice to return to the status display.

HOST

## Warnings

When the AIT drive needs cleaning or a specific part needs to be replaced upon reaching its periodic replacement time, a warning message is displayed on the LCD panel.



The warning messages and their solutions are as follows: "Cleaning Request":

The AIT drive needs to be cleaned.

Clean the AIT drive. For information about how to clean the drive, refer to "Cleaning the AIT Drive" (page 63) in Chapter 5, "Operating the AIT Drive".

"Threshold Condition Met":

The specific part has operated more than the specified number of times.

Since the specific part has reached the periodic exchange time, contact the service and support center.

#### "Drive Information":

An error occurred in the AIT drive. A two-digit error code appears after the warning message. For details about these codes, see "Other Messages" (page 100).

#### "FanX trouble":

An anomaly has occurred at fan X (where X is the fan number). Contact your nearest Sony Service Support Center.

#### "Cleaning Tape at EOM":

The spent cleaning cartridge is set. Replace the spent cleaning cartridge with a new one.

"Clean failure":

Cleaning failed. Repeat the cleaning procedure.

### **Errors**

When an error occurs in the AIT library, an error code appears on the LCD panel.

For information about error codes, refer to the "Error Code List" (page 98) in the "Appendix" chapter.



## Setting or Changing the Password

A password can be set on the AIT library. The password is used when accessing certain menus via Ethernet.

This section explains the steps required to set or change the password from the control panel.

Menu

7.Tape Inventory

Enter Password

8.Password 9.System Down

?

The password is extremely important to the security of the library. Closely guard the password.

#### Note

The password can also be set through a browser.

- 1 At the status display, press the [MENU] button for two seconds.
- 2 Use the **▼** and **▲** buttons to select "8.Password", then press the [ENTER] button.
- **3** When "Enter Password" appears, enter the first character of the current password in the following manner:
  - Use the ▼ and ▲ buttons to select a letter. The prospective letter is displayed in the "?" field.
  - After displaying the prospective letter, press the [ENTER] button. "\*" will be displayed.
  - Press the [CANCEL] button to erase one "\*".
  - If you are setting the password for the first time, enter "LIB-81A".
- **4** When "Enter New Password" appears, enter the new password up to eight alphanumeric characters and symbols (! @ # \$ % () { } ~ ").

The maximum number of characters that can be set for a password is eight. You can not enter more than eight characters.

- **5** Press the [ENTER] button.
- **6** Re-enter the new password.
- **7** Press the [ENTER] button.
- **8** When "[ENTER] to activate" appears, press the [ENTER] button.

The password is now set or changed. The display returns to the menu.

- Enter New Password ? \*\*\*\*\*\*\* ? \*\*\*\*\*\*\* [ENTER] to activate
- **9** Press the [CANCEL] button to return to the status display.

12:34

## **Basic Settings**

This section explains the steps required to configure the warning message display, bar code, R-MIC and brightness of the LCD panel using the Configuration Menu on the control panel.

#### Caution

There exist LIB-81 AIT library models without bar code or R-MIC readers. Make sure that your library is equipped with a bar code and/or R-MIC reader before modifying the "Barcode" or "R-MIC" setting. Modifying these settings when using LIB-81 AIT library models that are not equipped with the appropriate readers generates errors.

#### Note

For information about "Date & Time" of the Configuration Menu, refer to "Setting the Date and Time" (page 22) in Chapter 2, "Installation".

#### **Disabling the Life Warning Display**

When the device is shipped from the factory, the life warning is set to display. This default setting is recommended. (Thus the following setup is unnecessary.) Change this setting in "Warning" of the Configuration Menu.

#### Note

4

button.

The displaying of the life warning can also be set through a browser.

- 1 At the status display, press the [MENU] button for two seconds.
- 2 Use the  $\mathbf{\nabla}$  and  $\mathbf{\Delta}$  buttons to select "5.Configuration", then press the [ENTER] button.
- 3 Select "2.Warning", then press the [ENTER] button.
- Configuration 12:34 1.Date & Time 2.Warning 3.Barcode

YES

Use the  $\mathbf{\nabla}$  and  $\mathbf{\Delta}$  buttons to select Warning "YES", then press the [ENTER] Enable

The default factory setting is "YES". Select "NO" to not display the warning.

5 When "[ENTER] to activate" Warning appears, press the [ENTER] button.

Enable YES [ENTER] to activate

The life warning is now set. The display returns to the menu.

6 Press the [CANCEL] button twice to return to the status display.

#### Setting the Bar Code

You should only configure "Barcode" of the Configuration Menu so that the bar code labels affixed to cartridges can be read when your AIT library is equipped with a bar code reader. Before modifying this setting, make sure that your LIB-81 AIT library is equipped with a bar code reader.

#### Caution

When your library is not equipped with a bar code reader, leave this setting to "NO". If you change the setting to "YES", "No barcode reader installed" is displayed.

When the AIT library is equipped with a bar code reader but you do not want to use bar codes, leave this setting to "NO". If you change the setting to "YES", it will take longer for the inventory to be completed when the AIT library starts or a cartridge is set.

#### Note

The setting of the bar code can also be configured through a browser.

- At the status display, press the [MENU] button for two seconds.
- 2 Use the  $\bigvee$  and  $\blacktriangle$  buttons to select "5.Configuration", then press the [ENTER] button.

Configuration

1.Date & Time 2.Warning 3.Barcode

YES

YES

to activate

Barcode

[ENTER]

Enable

12:34

- **3** Select "3.Barcode", then press the [ENTER] button.
- 4 Use the ▼ and ▲ buttons to select "YES", then press the [ENTER] button.

The default factory setting is "NO". Select "YES" to read the bar code.

5 When "[ENTER] to activate" appears, press the [ENTER] button. Enable

When the bar code is read, the library returns to the menu display.

**6** Press the [CANCEL] button twice to return to the status display.

#### Setting the R-MIC Function

If you are using a model equipped with an R-MIC reader, only enable "R-MIC" of the Configuration Menu if you use AIT-5, AIT-4, AIT-3 Ex, or AIT-3 cartridges, or AIT cartridges with R-MIC. Before modifying this setting, make sure that your LIB-81 AIT library is equipped with an R-MIC reader.

#### Caution

If your library is not equipped with an R-MIC reader, you are using AIT-2 cartridges without R-MIC, or using AIT-1 cartridges, leave this setting to "NO".

If you change this setting to "YES", it will take longer for the inventory to be completed when the AIT library starts or when you set a cartridge.

#### Note

The R-MIC function can also be set through a browser.

- At the status display, press the [MENU] button for two seconds.
- 2 Use the  $\bigvee$  and  $\blacktriangle$  buttons to select "5.Configuration", then press the [ENTER] button.

Configuration

5.LCD Contrast 6.Sequential Mode

YES

4.R-MIC

R-MIC

Enable

12:34

- **3** Select "4.R-MIC", then press the [ENTER] button.
- 4 Use the V and ▲ buttons to select "YES", then press the [ENTER] button.

The default factory setting is "NO". Select "NO" to not use the R-MIC function.

- When "[ENTER] to activate" appears, press the [ENTER] button.
   The R-MIC function is now set. The display returns to the menu.
- **6** Press the [CANCEL] button twice to return to the status display.

#### Adjusting the Brightness of the LCD Panel

In "LCD Contrast" of the Configuration Menu, adjust the brightness of the LCD panel.

- 1 At the status display, press the [MENU] button for two seconds.
- 2 Use the  $\bigvee$  and  $\blacktriangle$  buttons to select "5.Configuration", then press the [ENTER] button.
- **3** Select "5.LCD Contrast", then press the [ENTER] button.
- Press the ▼ and ▲ buttons to adjust LCD contrast, then press the [ENTER] button.

Pressing the  $\checkmark$  button darkens the LCD panel, while pressing the  $\blacktriangle$  button makes it brighter.

- Configuration 12:34 4.R-MIC 5.LCD Contrast 6.Sequential Mode
- LCD Contrast



LCD	Contrast	

to activate

[ENTER]

The brightness of the LCD panel is now set. The display returns to the menu.

**6** Press the [CANCEL] button twice to return to the status display.

#### Using the Sequential Mode

Depending on your software, you can elect to activate the sequential mode in "Sequential Mode" of the Configuration Menu.

By activating the sequential mode, you can use the software to automatically instruct the library to return an ejected cartridge to its original slot and insert the next cartridge into the AIT drive. You can also adjust the settings so that if the library finds no cartridge in the next slot it inserts the next cartridge in the sequence into the AIT drive. It is also possible to make continuous unloading settings.

#### Caution

- You must use customized software to be able to use this function. Under normal circumstances, do not use the sequential mode.
- You can only make continuous unloading settings when the sequential mode is active.
- At the status display, press the [MENU] button for 2 second.
- 2 Use the V and ▲ buttons to select "5. Configuration", then press the [ENTER] button.

Configuration 12:34 4.R-MIC 5.LCD Contrast 6.Sequential Mode

**3** Select "6. Sequential Mode", then press the [ENTER] button.

"Sequential Mode" appears.

Sequential Mode 12:34 Sequential Mode NO Unload Continue NO

4 When the "Sequential Mode" setting blinks, use the ▼ and ▲ buttons to select "YES", then press the [ENTER] button.

By default, this is "NO". If you do not want use the sequential mode, leave this setting to "NO".

**5** When the "Unload Continue" setting blinks, use the  $\vee$  and  $\blacktriangle$  buttons to select "YES", then press the [ENTER] button.

By default, this is "NO". If you do not want use the continuous unloading function, leave this setting to "NO".

#### Note

If you do not set "Sequential Mode" in step 4 to "YES", you cannot change the "Unload Continue" setting.

**6** When "[ENTER] to activate" appears, press the [ENTER] button.

Press the [CANCEL] button twice to return to the status display.

## **Disabling the Buttons on the Front Panel**

To prevent accidentally pressing the control buttons, you can disable the buttons on the front panel. Use a browser to disable the buttons in the Library Administration Menu.

For details on the Library Administration Menu, refer to Chapter 6, "Library Administration Menu" (page 67).

- 1 Launch a browser, then access the Library Administration Menu.
- **2** Click "System Configuration".

The "Configuration" page appears.

Configuration	Network	SCSI ID	Password
Configuration setting	gs.		
Date & Time	Year N 2000 / 01	Ionth Day	Hour Min 10 : 30
Life Warning	• Enable	C Disable	
Key Operation	• Enable	C Disable	
R-MIC	C Enable	• Disable	
Barcode	C Enable	• Disable	
			Submit

- **3** At "Key Operation", click "Disable" to select.
- 4 Click "Submit".

The library is configured.

#### Note

If the library power is turned off, the "Key Operation" setting is returned to "Enable".

## **Assigned Element Addresses**

An element is a physical location where a cartridge can be kept. Applications use element addresses to differentiate between the elements of the AIT library. In this library, the element addresses are assigned to the cartridge slots and the AIT drives in the following manner.

#### Notes

- Since the element addresses of the library are fixed numbers, they cannot be reassigned.
- The element addresses of the drive appears as DR on the LCD of the library. For details about how to use element addresses to manipulate cartridges, see "Using the Cartridges" (page 50).



## Handling the Cartridges

When handling or storing the cartridges, note the following cautions.

#### Handling

- Do not subject the cartridges to strong vibrations. Do not drop the cartridges.
- When loading a cartridge into the AIT library, the lid of the cartridge opens up automatically. Do not manually open the lid and touch the interior tape.
- The cartridge is preadjusted at the factory, so do not disassemble it.
- The tab of a cartridge is used to prevent writing to the cartridge by accident.
- If the cartridge does not need to be written, move the tab to write protect it.
   → "Preparing the Cartridge" (page 25) in Chapter 2, "Installation".
- If the AIT library is used in a high-humidity environment or a location that is subject to wide variations in temperature, condensation may prevent cartridge read/write operation.
- If the cartridge needs not be written to or read from, do not insert or eject it too often.

#### Storing

- Store cartridges in an appropriate environment. Store cartridges according to the temperature and other surrounding conditions written on the package. Also, try to keep the temperature and humidity of the environment constant. Store cartridges out of the direct sun rays. Do not store them near heating systems. Never place cartridges on a dashboard or in the glove compartment of a car.
- Store cartridges where there is little dust. Eliminate sources of dust. Prohibit eating, drinking and smoking near the storage location. Also, do not store cartridges near copying machines or printers that emit toner and paper dust.
- When storing cartridge, set the erase-protection tab so that the data cannot be over written.
- After removing a cartridge from the library, store it in an appropriate location as soon as possible.

Avoid, as much as possible, changes of temperature and humidity, contamination by dust and scratches made by touching the interior tape.

## **Daily Maintenance**

Perform the following periodically.

• Clean the air filter.

If the front panel air filter is clogged with dust, the AIT library may overheat, resulting in fire or other damage. Periodically clean the air filter. For information about how to remove the air filter, refer to "Changing the Air Filter 1" (page 89) and "Changing the Air Filter 2" (page 91) in the "Appendix" chapter.

• Change the air filter. Change the front panel air filter once a year. For information about how to change the air filter, refer to "Changing the Air Filter 1" (page 89) and "Changing the Air Filter 2" (page 91) in the "Appendix" chapter.

# Operating the AIT Library Chapter

## **Overview**

This chapter explains how to take out, change and move the cartridges, how to view information about the AIT library, cartridges and errors, and how to test the hardware.

## **Using the Cartridges**

This section explains steps to take out, change and move the cartridges. For information about how to prepare and load the cartridges, refer to "Setting the Cartridges" (page 25) in Chapter 2, "Installation".

#### **Taking Out the Cartridges**

To take out a cartridge set in the AIT library or AIT drives specify the slot with the element address.

For information about element addresses, refer to "Assigned Element Addresses" (page 48) in Chapter 3, "Basic Usage".

To take a cartridge out of the AIT library:

- 1 At the status display, press the [MENU] button for two seconds.
- 2 Use the ▼ and ▲ buttons to select "2.Eject/Insert", then press the [ENTER] button.

"Eject/Insert" appears.

**3** Select "1.Eject From Library", then press the [ENTER] button.

Eject/Insert 12:34
1.Eject From Library
2.Eject From Drive
3.Insert Into Library

- **4** Select the cartridge ejection method, then press the [ENTER] button.
  - When you want to specify one slot and eject its cartridge, select "1. Single Mode".
  - When you want to eject several cartridges consecutively, select "2. Multiple Mode". In this case, you only need to specify the first slot.
- 5 Use the  $\checkmark$  and  $\blacktriangle$  buttons to set the element address of the slot where the cartridge to be taken out is set, then press the [ENTER] button.
- **6** When "[ENTER] to activate" appears, press the [ENTER] button.

Eject		12:34
1.Single	Mode	
2.Multiple	Mode	

Slot 01

Slot 01

The cartridge dock shutter opens.



**7** Remove the cartridge from the slot.

Raise the cartridge about 1 mm and pull it out.



**8** If you selected "1. Single Mode" in step 4, press the [CANCEL] button.

#### Slot 01 Eject Tape [CANCEL] to exit

#### Note

Even if you selected "1. Single Mode" in step 4, you can remove a different cartridge by using the ▼ and ▲ buttons to select the slot element address, and then pressing the [ENTER] button. Because you did not select "2. Multiple Mode" in step 4, the cartridge dock shutter closes and reopens. When it does, you can remove another cartridge as explained above. If you do so, when you are done removing cartridges press the [CANCEL] button and proceed to step 10.

**9** If you selected "2. Multiple Mode" in step 4, perform the following depending on the number of inserted cartridges.

## Two or more inserted cartridges

The element address of the front slot appears on the first line. The element address of the next slot appears on the second line.

- 1 Eject the cartridge and press the [ENTER] button.
- **2** The slot moves to the next. Eject the cartridge in the same manner and press the [ENTER] button. When you press the [ENTER] button, the slot moves to the next.
- **3** Repeat until all the cartridges are ejected, and then press the [CANCEL] button.

#### Only one inserted cartridge

The element address of the front slot appears on the first line. (Nothing appears on the second line.)

1 Eject the cartridge and press the [CANCEL] button.

#### Caution

Do not put your fingers in the slot when it is moving, as this could result in injuries.

**10** When "[ENTER] to activate" appears, press the [ENTER] button.

If you selected "1. Single Mode" in step 4, the display on the right appears.

If you selected "2. Multiple Mode" in step 4, the display on the right appears.

The shutter closes and the initialization is performed.

#### Eject Tape Slot 01 Next Slot 02 [CANCEL] to exit [ENTER] to next slot

Eject Tape Slot 01 [CANCEL] to exit

[ENTER] to activate Eject Tape Slot 01 Exit ?

[ENTER] to activate

Slot 01

Slot

Exit ?

Initializing

01

#### Caution

Keep your fingers clear of the shutter when it closes.

**11** When the initialization ends, press the [CANCEL] button three times to return to the status display.

#### **Replacing the Cartridges**

When replacing a cartridge, specify the slot using the element address. For information about element addresses, refer to "Assigned Element Addresses" (page 48) in Chapter 3, "Basic Usage".

To replace a cartridge set in the AIT library:

- 1 At the status display, press the [MENU] button for two seconds.
- 2 Use the ▼ and ▲ buttons to select "2.Eject/Insert", then press the [ENTER] button.

"Eject/Insert" appears.

3 Select "1.Eject From Library", then press the [ENTER] button. Eject/Insert 12:34 1.Eject From Library

Eject

1.Single

- **4** Select the cartridge ejection method, then press the [ENTER] button.
  - When you want to specify one slot and eject its cartridge, select "1. Single Mode".
  - When you want to eject several cartridges consecutively, select "2. Multiple Mode". In this case, you only need to specify the first slot
- 5 Use the ▼ and ▲ buttons to set the element address of the slot where the cartridge to replace is set, then press the [ENTER] button.
- **6** When "[ENTER] to activate" appears, press the [ENTER] button.

Slot	01		

2.Eject From Drive 3.Insert Into Library

2.Multiple Mode

Mode

12:34

Slot 01

[ENTER] to activate

The cartridge dock shutter opens.

**7** Remove the cartridge from the slot.

Raise the cartridge about 1 mm and pull it out.



**8** If you selected "1. Single Mode" in step 4, press the [CANCEL] button.

Slot 01 Eject Tape [CANCEL] to exit

#### Note

Even if you selected "1. Single Mode" in step 4, you can remove a different cartridge by using the ▼ and ▲ buttons to select the slot element address, and then pressing the [ENTER] button. Because you did not select "2. Multiple Mode" in step 4, the cartridge dock shutter closes and reopens. When it does, you can remove another cartridge as explained above. If you do so, when you are done removing cartridges press the [CANCEL] button and proceed to step 10.

**9** If you selected "2. Multiple Mode" in step 4, perform the following depending on the number of inserted cartridges.

## Two or more inserted cartridges

The element address of the front slot appears on the first line. The element address of the next slot appears on the second line.

- 1 Eject the cartridge and press the [ENTER] button.
- **2** The slot moves to the next. Eject the cartridge in the same manner and press the [ENTER] button. When you press the [ENTER] button, the slot moves to the next.
- **3** Repeat until all the cartridges are ejected, and then press the [CANCEL] button.

Eject Tape Slot 01 Next Slot 02 [CANCEL] to exit [ENTER] to next slot

#### Only one inserted cartridge

The element address of the front slot appears on the first line. (Nothing appears on the second line.)

**1** Eject the cartridge and press the [CANCEL] button.

#### Caution

Do not put your fingers in the slot when it is moving, as this could result in injuries.

**10** When "[ENTER] to activate" appears, press the [ENTER] button.

	If you selected "1. Single Mode" in step 4, the display on the right appears.	Slot 01 Exit ? [ENTER] to activate
	If you selected "2. Multiple Mode" in step 4, the display on the right appears.	Eject Tape Slot 01 Exit ? [ENTER] to activate
	The shutter closes and the initialization is performed.	Slot 01 Initializing
	<b>Caution</b> Keep your fingers clear of the shutter when it closes.	
11	When the initialization ends, press th "Eject/Insert" display.	ne [CANCEL] button to return to
12	Select "3.Insert Into Library", then press the [ENTER] button.	Eject/Insert 12:34 1.Eject From Library 2.Eject From Drive 3.Insert Into Library
13	Select the cartridge insertion method, then press the [ENTER] button.	Insert 12:34 1.Single Mode 2.Multiple Mode
	<ul> <li>When you want to specify a slot and insert cartridge in it, select "1. Single Mode".</li> <li>When you want to insert several cartridges consecutively, select "2. Multiple Mode". In this case, you only need to specify the first s</li> </ul>	lot.
14	Use the $\bigvee$ and $\blacktriangle$ buttons to set the element address of the slot where the cartridge is going to be set, then press the [ENTER] button.	Slot 01

Eject Tape Slot 01 [CANCEL] to exit **15** When "[ENTER] to activate" appears, press the [ENTER] button.

The cartridge dock shutter opens.

[ENTER] to activate

01

Slot

**16** Insert the cartridge into the slot.

Be sure to insert it all the way.



**17** If you selected "1. Single Mode" in step 13, press the [CANCEL] button.

Slot 01 Insert Tape [CANCEL] to exit

#### Note

Even if you selected "1. Single Mode" in step 13, you can insert a different cartridge by using the ▼ and ▲ buttons to select the slot element address, and then pressing the [ENTER] button. Because you did not select "2. Multiple Mode" in step 13, the cartridge dock shutter closes and reopens. When it does, you can insert another cartridge as explained above. If you do so, when you are done inserting cartridges press the [CANCEL] button and proceed to step 19. **18** If you selected "2. Multiple Mode" in step 4, perform the following depending on the number of open slots.

#### Two or more open slots

The slot moves to the next one. When it stops, insert another cartridge and press the [ENTER] button again. Repeat until all the cartridges are inserted, then press the [CANCEL] button.

- **1** Insert a cartridge and press the [ENTER] button.
- **2** The slot moves to the next. Insert another cartridge in the same manner and press the [ENTER] button.

When you press the [ENTER] button, the slot moves to the next.

**3** Repeat until all the cartridges are inserted, and then press the [CANCEL] button.

#### Only one open slot

The element address of the front slot appears on the first line. (Nothing appears on the second line.)

**1** Insert a cartridge and press the [CANCEL] button.

Insert Tape Slot 01 Next Slot 02 [CANCEL] to exit [ENTER] to next slot

Insert Tape Slot 01 [CANCEL] to exit

#### Caution

Do not put your fingers in the slot when it is moving, as this could result in injuries.

**19** When "[ENTER] to activate" appears, press the [ENTER] button.

If you selected "1. Single Mode" in step 4, the display on the right appears.	Slot 01 Exit ? [ENTER] to activate
If you selected "2. Multiple Mode" in step 4, the display on the right appears.	Insert Tape Slot 01 Exit ? [ENTER] to activate
The shutter closes and the initialization is performed.	Slot 01 Initializing
<b>Caution</b> Keep your fingers clear of the shutter when it closes	

shutter when it closes.

**20** When the initialization ends, press the [CANCEL] button three times to return to the menu display.

#### Moving the Cartridges

It is possible to move a cartridge from a slot to the AIT drive or vice versa. Set the cartridge in the slot before performing the procedure below. When moving a cartridge, specify the slot with the element address. For information about element addresses, refer to "Assigned Element Addresses" (page 48) in Chapter 3, "Basic Usage".

#### Notes

- It is not possible to move a cartridge between slots. When you want to set a cartridge in a different slot, first remove the cartridge, then set it in a different slot.
- It is not possible to remove a cartridge directly from the AIT drive. Perform the procedure below, move the cartridge to the desired slot, and then remove it.
- 1 At the status display, press the [MENU] button for two seconds.
- 2 Use the ▼ and ▲ buttons to select "3.Move Tape", then press the [ENTER] button.
- 3 Use the ▼ and ▲ buttons to set the element address of the slot that has the moving source cartridge, then press the [ENTER] button.

Source	DR	
Destination	01	

#### Note

"DR" indicates an AIT drive.

- 4 Use the **▼** and **▲** buttons to set the element address of the destination slot, then press the [ENTER] button.
- **5** When "[ENTER] to activate" appears, press the [ENTER] button.

Source Destination		DR 01
[ENTER]	to	activate

The cartridge moves to a new slot, and the display returns to the menu.

**6** Press the [CANCEL] button to return to the status display.

## **Viewing Information Related to the AIT Library**

Using the Information Menu of the control panel, the following information related to the AIT library can be viewed:

- Vendor ID
- Product name
- Serial number
- Version

#### Note

Information related to the AIT library can also be viewed through a browser.

1 At the status display, press the [MENU] button for two seconds.

"Information" appears.

- **2** Select "1.Information", then press the [ENTER] button.
- **3** Select "1.Library", then press the [ENTER] button.

Information 12:34 1.Library 2.Drive

The library information is displayed.

V/ID	SONY LIB-81 12345678 on 0100
Name	LIB-81
S/N	12345678
Versi	on 0100

**4** Press the [CANCEL] button three times to return to the status display.

## **Viewing Cartridge Information**

Using the Tape Inventory Menu of the control panel, the following information related to the cartridges can be viewed:

- Bar code information When the AIT library is equipped with a bar code reader, you can view the bar code information about the set cartridges by element addresses.
- R-MIC information When the AIT library is equipped with an R-MIC reader, you can view the R-MIC information of set AIT-5, AIT-4, AIT-3 Ex, and AIT-3 cartridges, and AIT-2 cartridges with R-MIC by element address.

#### Notes

- For information about element addresses, refer to "Assigned Element Addresses" (page 48) in Chapter 3, "Basic Usage".
- The bar code information and R-MIC information can be viewed through a browser.
- At the status display, press the [MENU] button for two seconds.
- 2 Use the  $\bigvee$  and  $\blacktriangle$  buttons to select "7.Tape Inventory", then press the [ENTER] button.

"Tape Inventory" appears.

**3** To view the bar code information, select "1.Barcode", then press the [ENTER] button.

Tape Inventory 12:34 1.Barcode 2.R-MIC When the AIT library is equipped with a bar code reader, the bar code information is only displayed when the bar code setting is "YES" or "Enable".

- When a cartridge is not set, "No Tape" is displayed.
- If a cartridge with no bar code information is set, nothing is displayed.
- Press the ▼ button to view the next element address information, and press the ▲ button to return to the previous display.
- **4** To view the R-MIC information, select "2.R-MIC", then press the [ENTER] button.

The R-MIC information is only displayed if you are using an AIT-3, AIT-3 Ex, or AIT-4 model and the R-MIC setting is "YES" or "Enable".

01:12345678

02:No Tape

- When a cartridge is not set, "No Tape" is displayed.
- If a cartridge with no R-MIC information is set, nothing is displayed.
- Press the ▼ button to view the next element address information, and press the ▲ button to return to the previous display.
- **5** Press the [CANCEL] button three times to return to the status display.

01:12345678

02:No Tape

## Operating the AIT Drive Chapter

## **Overview**

This chapter explains how to view information related to the AIT drive and how to clean the AIT Drive.

## **Viewing Information Related to the AIT Drive**

Using the Information Menu of the control panel, the following information related to the AIT drive can be viewed:

- Vendor ID
- Product name
- Serial number
- Version

#### Note

Information related to the AIT drives can also be viewed through a browser.

- At the status display, press the [MENU] button for two seconds.
- **2** Select "1.Information", then press the [ENTER] button.

"Information" appears.

3 Select "2.Drive", then press the [ENTER] button. I.Library 2.Drive

The AIT drive information is displayed.

V/ID SONY Name SDX-700C

5

S/N 12345678 Version 0100

**4** Press the [CANCEL] button three times to return to the status display.

12:34

## **Cleaning the AIT Drive**

When the AIT drive needs to be cleaned, the following message appears on the LCD panel:

```
Warning 12:34
Cleaning request
```

Clean the drive by setting the Cleaning cartridge (sold separately) in the AIT drive. To set the cleaning cartridge, specify the slot and the AIT drive with an element address. For information about element addresses, refer to "Assigned Element Addresses" (page 48) in Chapter 3, "Basic Usage".

There are four types of cleaning cartridges: the SDX5-CL for use with AIT-5 drives; SDX4-CL or SDX4-CLL for use with AIT-4 drives; SDX3X-CL for use with AIT-3 Ex drives; and SDX1-CL for use with AIT-3, AIT-2, and AIT-1 drives. Make sure that you use the cleaning cartridge appropriate for your drive.

#### Note

First set the cleaning cartridge in the AIT library, then move it to the AIT drive. Check in advance which slot is not occupied. For information about how to check, refer to "Viewing Cartridge Information" (page 60) in Chapter 4, "Operating the AIT Library".

- 1 At the status display, press the [MENU] button for two seconds.
- 2 Use the V and ▲ buttons to select "2.Eject/Insert", then press the [ENTER] button.

"Eject/Insert" appears.

3	Select "3.Insert Into Library", then press the [ENTER] button.	Eject/Insert 12:34 1.Eject From Library 2.Eject From Drive 3.Insert Into Library
4	Select "1. Single Mode", then press the [ENTER] button.	Insert 12:34 1.Single Mode 2.Multiple Mode
5	Use the $\bigvee$ and $\blacktriangle$ buttons to set the element address of the slot where the cleaning cartridge is going to be set, then press the [ENTER] button.	Slot 01
6	When "[ENTER] to activate" appears, press the [ENTER] button.	Slot 01
		[ENTER] to activate

The shutter of the cartridge dock opens.



#### Caution

Keep your fingers clear of the shutter when it closes.

- **10** When the initialization ends, press the [CANCEL] button twice to return to the menu, select "7.Move Tape", then press the [ENTER] button.
- 11 Use the ▼ and ▲ buttons to set the element address of the slot where the cleaning cartridge is set, then press the [ENTER] button.

Source 01 Destination DR

- **12** Make sure that "DR" is selected, then press the [ENTER] button.
- 13 When "[ENTER] to activate" appears, press the [ENTER] button. Source 01 Destination DR [ENTER] to activate

The cleaning cartridge moves to the AIT drive, and cleaning begins. Cleaning takes about 30 seconds. (No message is displayed to indicate that cleaning is completed. Please wait for about 30 seconds.)

- **14** When cleaning is finished, use the Move Tape Menu to move the cleaning cartridge form the AIT drive to the AIT library.
- **15** Use the "Eject From Library" of the Eject/Insert Menu to take out the cleaning cartridge.
- **16** Press the [CANCEL] button three times to return to the status display.

#### Note

- If an error message appears, perform one of the following.
- When "Cleaning Tape at EOM" is displayed, a spent cleaning cartridge is set in the AIT drive. Replace the spent cleaning cartridge with a new one.
- When "Clean failure" is displayed, cleaning failed. Repeat the cleaning procedure.

# Using the Library Administration Menu

## Overview

This chapter explains what you can do with the Library Administration Menu, and how you can operate it. It also explains details about menus. Use the Library Administration Menu through a browser to manipulate objects and configure settings related to the system, the network and the SCSI IDs. It can also check the operation condition and view the AIT library and AIT drive information.

#### Notes

In order to configure and maintain the library through a browser, browser software must be installed in the computer. The following operating systems and browsers are compatible with the library.

Operating systems:

 Microsoft Windows 95, Microsoft Windows 98, Microsoft Windows Me, and Microsoft Windows 2000

Browsers:

- Microsoft Internet Explorer 5.01 or later
- Netscape Communicator 4.7 or later

#### Precautions when using the Library Administration Menu

When using the Library Administration Menu, note the following browser settings.

- If "Enable or disable JavaScript" is not set to "Enable", the time in "Date & Time" will not advance.
- If "Do not use the font size (style) specified in the Web page" is set, the display layout may collapse.
- When the pages are viewed using the "Back" button, the newest information may not be displayed because this operation displays the screens saved in a cache of the browser.
- If an incorrect parameter is entered, you may not be able to return display to the former settings by using the browser's cache function. In that case, return display to the former setting by using the browser's Back button.
- When using Netscape 6.0, set the font size to "100%" or the display layout may collapse. If "Always use user fonts" is selected, the display layout may collapse.

## **Library Administration Menu**

When the Library Administration Menu is accessed using a browser, the following objects can be accomplished through the browser:

- · Configure system-related settings
- Configure network-related settings
- Configure SCSI ID-related settings
- Set or change the password
- Update the firmware
- Check the operation condition
- Check the AIT library
- View the AIT library and AIT drive information
- View logs

## **Accessing Library Administration Menu**

Use the browser to operate the Library Administration Menu.

#### Note

The Library Administration Menu contains English and Japanese pages. Clicking **English Japanese** in the upper-right corner of the page allows you to alternate between the English and Japanese pages.

- Launch a browser on a client computer.
- 2 Enter "http://XXX.XXX.XXX.XXX/" in the "Address" or "Location" field.

For "XXX.XXX.XXX.XXX", enter the IP address set in the server. (e.g., 192.168.0.1)

#### Note

If the IP address assigned by a DHCP server is being used, enter the current IP address in the "Address" field of the browser. The current IP address can be checked with "IP Address" of the Network Menu of the control panel.

The top page of the Library Administration Menu appears.

#### Edit Tools Help ⊻ie ← Back - → - ② ② △ ② Search @ Fa Address ❷ http://192.168.0.1/ ory | 🖏 - 🎒 🕅 - 📃 tes 🎯 ▼ 🖗 Go 🛛 Links » English 🖬 Jap STORSTATION System Configuration 3 Configur. Network SCSI ID Possword 1 Library Administration Menu Informati Inventory Maintenance Information All right reserved by Sony Corporation 🛃 Don 🍘 Interne

(Example) When using Microsoft Internet Explorer

**3** Click the button of the menu to operate.

The page corresponding to the selected menu appears.

#### (Example) "System Configuration" page

System Configuration					
Configuration	Network SCSI IE	Password			
Configuration settings					
Date & Time	Year         Month         Day           2000         / 01         / 01	Hour Min 10 : 30			
Life Warning	• Enable 🔿 Disable				
Key Operation	• Enable C Disable				
R-MIC	C Enable 💿 Disable				
Barcode	C Enable 📀 Disable				
		Hour Min 10 : 30			

4 To return to the top page, click **Home** 

#### Note

When accessing the Library Administration Menu, we strongly recommend that you change the password before configuring the settings. For information about how to set the password, refer to "Password" (page 75) of "System Configuration Menu".

## **Menu Items**

The following menus are included in the Library Administration Menu.

#### Note

The Library Administration Menu contains English and Japanese pages. Clicking **English Japanese** in the upper-right corner of the page allows you to alternate between the English and Japanese pages.

- System Configuration Menu You can operate and configure settings related to the system, the network and the SCSI IDs.
  - → "System Configuration Menu" (page 69)
- Maintenance Menu You can check the operation condition, the AIT library and upload the firmware of this library.
  - → "Maintenance Menu" (page 76)
- Information Menu You can view information about the AIT library, the AIT drives and the cartridges.
  - → "Information Menu" (page 86)

The rest of this chapter explains what each menu can do.

## **System Configuration Menu**

In the System Configuration Menu, objects related to the system and network can be configured, and settings related to the system and network can be changed.

The following items are in the System Configuration Menu.

• Configuration

System objects such of the date and time, the life warning display, the R-MIC function, and the bar code can be configured.

- Network
  - Network related settings can be configured.
- SCSI ID
  - The SCSI IDs of the AIT library and AIT drives can be set.
- Password

The password can be set or changed.

#### Configuration

In "Configuration", such objects of the system as the date and time, the life warning display and the R-MIC function can be configured.

#### Note

In "Configuration", some of the items can be set in the Configuration Menu of the control panel.

1 Click "System Configuration" on the Library Administration Menu. You can also directly click "Configuration" which is located below "System Configuration".

Configuration Configuration settings. Day Year Month Hour Min / 01 / 01 : 30 2000 10 Date & Time Life Warning • Enable 🔘 Disable **Key Operation** • Enable O Disable R-MIC 🔿 Enable • Disable • Disable Barcode C Enable Submit

The "Configuration" page appears.

**2** Set the following items.

#### Date & time

Set the date and time of the AIT library. For date, enter in "year/month/ day" format and for time, enter in "hour:minute:second" format. By default, this setting is "2001/1/1 12:00:00" (January 1st, 2001, 12 noon). Set this to the current date and time.

#### Note

The date and time cannot be updated when the AIT library is off.

#### Life Warning

Click to select whether or not to display the warning given when a specific part has been operated more times than the specified number of times. The warning is displayed on the LCD panel of the library. If "Disable" is selected, the warning will not be displayed.

#### **Key Operation**

Click to select whether or not to enable the buttons (the power standby switch and control buttons) on the front panel. If "Disable" is selected, the buttons will not function.

#### Note

If the library power is turned off, the "Key Operation" setting is returned to "Enable".

#### **R-MIC**

If you are using a model equipped with an R-MIC reader, set whether to enable to enable the R-MIC function when using an AIT-5, AIT-4, AIT-3 Ex, or AIT-3 cartridge, or AIT-2 cartridge with R-MIC. When using AIT-2 cartridges without R-MIC or AIT-1 cartridges, select "Disable".

#### Barcode

When the AIT library is equipped with a bar code reader, set whether or not to read the bar code affixed to the cartridge. If "Disable" is selected, the bar code will not be read.

#### Caution

- When the AIT library is not equipped with a bar code reader, do not change the setting to "Enable" as this causes an error to be displayed when the library starts or when a cartridge is set.
- If you selected "Enable" for the R-MIC setting and use cartridges without R-MIC, or if you selected "Enable" for the bar code setting and use cartridges without bar code labels, initialization after turning on the library or using the cartridges becomes unusually long. Make sure that you use appropriate cartridges and settings.

**3** Click "Submit".

The library is configured.

#### Network

In "Network", network-related settings can be configured. After configuring, the AIT library must be restarted.

#### Note

The network settings can also be configured with the Network Menu of the control panel.

1 Click "System Configuration" on the Library Administration Menu, then click "Network". You can also directly click "Network" which is located below "System Configuration".

The page to enter the password appears.

**2** Enter the password, then click "OK".

Input password.	
Password	
	ОК

#### Note

Each access to the "Network" requires the password to be entered. For information about the password, refer to "Password" (page 75). By default, the password is "LIB-81A".

**3** When the following screen appears, enter "LIB81" for "User Name" and "SONY" for "Password", then click "OK".

Enter Net	nter Network Password			
<b>?</b> >	Please type your user name and password.			
۶J	Site:	192.168.0.1		
	Realm	/cgi/SNetGet.cgi		
	<u>U</u> ser Name	LIB81		
	<u>P</u> assword	XXXX		
	□ <u>S</u> ave this	password in your password list		
		OK Can	cel	

#### Note

This screen appears only when you start you browser and access the Library Administration Menu. The confirmation performed in this screen is effective until you close your browser.
The "Network" page appears.

Configuration	Network	SCSI ID	Password
Network settings.			
Host Name	LIB-81		
Domain Name	×××		
DHCP	C Enable	• Disable	
IP Address	192 . 168	. 0 . 1	
Subnet Mask	255 . 255	. 255 . 0	
Gateway	0.0	. 0 . 0	
DNS(Primary)	0.0	. 0 . 0	
DNS(Secondary)	0.0	. 0 . 0	
	The Libi	rary will cycle power a	nd activate changes. <b>Submit</b>

**4** Set the following items.

### Host Name

Enter the host name up to 63 alphanumeric characters and symbols ( - ). (However, the AIT library does not support DNS.)

### **Domain Name**

Enter the domain name up to 63 alphanumeric characters and symbols (-.). (However, the AIT library does not support DNS.)

### DHCP

Click to choose whether or not to use an IP address assigned by the network DHCP server. The following settings are not required if you click "Enable".

### **IP Address**

Enter the IP address.

### Subnet Mask

Enter the subnet mask.

### Gateway

Enter the default gateway address.

### **DNS (Primary)**

"DNS (Primary)" is not supported.

### **DNS (Secondary)**

"DNS (Secondary)" is not supported.

**5** Click "Submit".

6

When "Reboot now?" appears, click "OK".

The settings become effective when the library restarts. After the library has restarted, if the screen displayed by your browser is not correct, click "Refresh".

### Note

If the IP address assigned by a DHCP server is being used, enter the current IP address in the "Address" field of the browser, and then click "Submit". The current IP address can be checked with "IP Address" of the Network Menu of the control panel.

## **SCSI ID**

In "SCSI ID", the SCSI IDs and SCSI parities of the AIT library and AIT drives can be set. After configuring, the AIT library must be restarted.

### Caution

Do not use the same SCSI IDs on a same SCSI bus.

### Note

The SCSI IDs and SCSI parities can also be set using the SCSI Menu of the control panel.

1 Click "System Configuration" on the Library Administration Menu, then click "SCSI ID". You can also directly click "SCSI ID" which is located below "System Configuration".

Configuration	Network	SCSI ID	Password				
SCSI ID settings. The Library and Drive SCSI IDs must be different.							
	SCSID	Parity					
Library	0	• On 🔿 Off					
Drive	1	• On • Off					
	The Library w	ill cycle power when ch	anges are submitted.				

The "SCSI ID" page appears.

**2** Set the following items.

#### Library

Enter whether or not to enable SCSI ID and SCSI parity of the AIT library.

#### Drive

Enter whether or not to enable SCSI ID and SCSI parity of Drive.

- **3** Click "Submit".
- **4** When "Reboot now?" appears, click "OK".

The settings become effective when the library restarts. After the library has restarted, if the screen displayed by your browser is not correct, click "Refresh".

## Password

In "Password", the password can be set or changed. The password is extremely important for the security of the library. When accessing the Library Administration Menu, be sure to change the password before configuring the settings. Furthermore, closely guard the password.

### Notes

- Because the password and control panel password are the same, the password can also be set using the Password Menu of the control panel.
- The network password and user name are separate, therefore cannot be changed.
- 1 Click "System Configuration" on the Library Administration Menu, then click "Password". You can also directly click "Password" which is located below "System Configuration".

The "Password" page appears.

Configuration	Network	SCSI ID	Password
Change password Input current password and	l new password.		
Current Password			
New Password		_	
Confirm New Password			
			Submit

**2** In the "Current Password" box, enter the current password.

If you are setting the password for the first time, enter "LIB-81A".

- **3** In the "New Password" box, enter the new password up to eight alphanumeric characters and symbols (! @ # \$ % () { } ~ ").
- 4 In the next "Confirm New Password" box, re-enter the same password.
- **5** Click "Submit".

A message that indicates the completion of setting is displayed.

#### Caution

The maximum number of characters that can be set for the password is eight. It is not possible to input more than eight characters.

## **Maintenance Menu**

In the Maintenance Menu, the condition of the AIT library can be checked, and the firmware of this library can be updated.

#### Note

Each access to the Maintenance Menu requires the password to be entered. Enter "LIB-81A" in the "Password" box, then click "OK". For information about the password, refer to "Password" (page 75).

The following items are in the Maintenance Menu.

- Life Count
- Displays the number of times a specific part has been operated.
- Error Count

Displays the number of times an operation was tried or an error occurred in a specific part.

• Sensor

Displays information about the individual sensors, DIP switches and encoder values.

• History

Logs can be viewed.

- Diagnostic
- You can check whether or not the AIT library is functioning normally.
- Firmware Upload
  - The firmware of the AIT library can be uploaded.

## Life Count

In "Life Count", the number of times a specific part has been operated is displayed.

- 1 In the Library Administration Menu, click "Maintenance". You can also directly click "Life Count", which is located above "Maintenance".
- **2** Enter the password, then click "OK".

Input password.	
Password	
	ОК

### Note

Each access to the Maintenance Menu requires the password to be entered. For information about the password, refer to "Password" (page 75).

The "Life Count" page appears.

Life Count Error Coun	t Sensor	History	Diagnostic	Firmware Upload
	current		maximum	
Slider	793	4	50000	
Picker	718	3	00000	
Turn Table	1398	2	00000	
Shutter	213	1	00000	
Fan	9	5	0000	
Drive	50	5	0000	
Boot	16			
Flash	0			
				1.1

In the "Life Count" page, the numbers of times the following specific parts have been operated are displayed.

- Slider
- Picker
- Turn Table
- Shutter
- Fan (During operation)
- Drive
- Boot
- Flash

## **Error Count**

In "Error Count", the number of times an operation was tried or an error occurred in a specific part is displayed.

1 In the Library Administration Menu, click "Maintenance", then click "Error Count". You can also directly click "Error Count", which is located above "Maintenance".

## Note

Each access to the Maintenance Menu requires the password to be entered. Enter the password, then click "OK". For information about the password, refer to "Password" (page 75). The "Error Count" page appears.

Life Count Error Cou	Int Sensor	History	Diagnostic	Firmware Upload
Slider	0			
Picker	0			
Turn Table	3			
Shutter	5			
Fan	0			
Drive	0			
				100 C

In the "Error Count" page, the number of times an operation was tried or an error occurred in the following specific parts are displayed.

- Slider
- Picker
- Turn Table
- Shutter
- Fan
- Drive

## Sensor

In "Sensor", information about the individual sensors, DIP switches and encoder values are displayed.

1 In the Library Administration Menu, click "Maintenance", then click "Sensor". You can also directly click "Sensor", which is located above "Maintenance".

## Note

Each access to the Maintenance Menu requires the password to be entered. Enter the password, then click "OK". For information about the password, refer to "Password" (page 75). The "Sensor" page appears.

Life Count Error C	ount Sensor	History	Diagnostic Firmware Upload
Sensor		Switch	
Turn Table Ref	Oon ⊙Off	switch01 switch02	Con ©Off Con ©Off
Turn Table Index	Con ⊙Off	switch03 switch04	COn ⊙Off
Slider Ref	Con ⊙Off	switch05	Con ©Off Con ©Off Con Conf
Slider Pos	COn ©Off	switch06 switch07	⊙On ⊖Off ⊙On ⊖Off
Picker Open	⊙on Coff	switch08	COn ©Off ────
Picker Close	Oon ⊙Off	Encoder	
Shutter Open	⊙on ⊂off	Turn Table	1978
	<u> </u>	Slider	2
Shutter Close	On ©Off		
Tape In (Slot)	Con ©Off		
Tape In (Picker)	⊙On COff	1	

In the "Sensor" page, information about the following specific parts are displayed.

### Sensor

- Turn Table Ref
- Turn Table Index
- Slider Ref
- Slider Pos
- Picker Open
- Picker Close
- Shutter Open
- Shutter Close
- Tape In (Slot)
- Tape In (Picker)

### Switch

- switch01
- switch02
- switch03
- switch04
- switch05
- switch06
- switch07
- switch08

### Encoder

- Turn Table
- Slider

## History

In "History", the following logs can be viewed.

- Mechanical log
- SCSI log
- Error log
- 1 In the Library Administration Menu, click "Maintenance", then click "History". You can also directly click "History", which is located above "Maintenance".

### Note

Each access to the Maintenance Menu requires the password to be entered. Enter the password box, then click "OK". For information about the password, refer to "Password" (page 75).

The "History" page appears.

Life Count Error Count	Sensor	History	Diagnostic	Firmware Upload
• • • • • •			•	
Mechanical	€. ●	ICSI	• E	irror

**2** Click • of the log you want to view.

### Mechanical

Displays the Mechanical log. A maximum of 128 entries are displayed in this log.

### SCSI

Displays the SCSI log. A maximum of 128 entries are displayed in this log.

### Error

Displays the Error log. A maximum of 32 entries are displayed in this log.

The selected log page appears.

Mechanical	SCSI	Error
001	tt_pos(1,SLANT) Jan/01 10:00:13	
002	sl_init	
003	pk_pos(OPEN) Jan/01 10:01:01	
004	pk_pos(CLOSE) Jan/01 09:01:07	
005	sl_pos(CATCH_D) Jan/01 10:01:05	
006	tt_pos(8,DRIVE)	
007	pk_pos(OPEN) Jan/01 10:01:02	
008	tt_pos(8,EXIST) Jan/01 10:01:00	
009	tt_pos(7,EXIST) Jan/01 10:00:00	
010	tt_pos(6,EXIST) Jan/01 10:00:58	
011	tt_pos(5,EXIST) Jan/01 10:00:00	
012	tt_pos(4,EXIST) Jan/01 10:00:55	
013	tt_pos(3,EXIST) Jan/01 10:00:54	
014	tt_pos(2,EXIST)	
015	tt_pos(1,EXIST) Jan/01 09:00:50	
016	tt_init Jan/01 10:00:06	▼
		4
		Sack

### (Example) When the "Mechanical" page is selected

- Click  $\blacksquare$  to display the next log, and  $\blacksquare$  to display the previous log.
- Click **A Back** to return to the [History] page.

## Diagnostic

In "Diagnostic", you can check whether or not the AIT library is functioning normally.

1 In the Library Administration Menu, click "Maintenance", then click "Diagnostic". You can also directly click "Diagnostic", which is located above "Maintenance".

### Note

Each access to the Maintenance Menu requires the password to be entered. Enter the password, then click "OK". For information about the password, refer to "Password" (page 75). The "Diagnostic" page appears.

Life Count Error Count	Sensor	History	Diagnostic	Firmware Upload
Execute diagnostic.				
	Diag	nostic		
	Result			
				xecute

## **2** Click "Execute".

Starts diagnosing the library. When diagnosing is completed, the result of the diagnosis is displayed on "Result".

## **Firmware Upload**

In "Firmware Upload", the firmware of the AIT library can be uploaded. Please consult your dealer about uploading firmware.

1 In the Library Administration Menu, click "Maintenance", then click "Firmware Upload". You can also directly click "Firmware Upload", which is located above "Maintenance".

When you access the Maintenance Menu, the page to enter the password appears.

**2** Enter the password, then click "OK".

Input password.	
Password	
	ОК

### Note

Each access to the "Maintenance" requires the password to be entered. For information about the password, refer to "Password" (page 75).

**3** When the following screen appears, enter "LIB81" for "User Name" and "SONY" for "Password", then click "OK".

Enter Net	work Passwo	rd	? ×
<b>?</b> >	Please type yo	our user name and password.	
গ্র	Site:	192.168.0.1	
	Realm	/cgi/SNetGet.cgi	
	<u>U</u> ser Name	LIB81	
	Password	XXXX	
	□ <u>S</u> ave this	password in your password list	
		OK Can	icel

### Note

This screen appears only when you start you browser and access the Library Administration Menu. The confirmation performed in this screen is effective until you close your browser. The "Firmware Upload" page appears.

Life Count Erro	or Count Sensor	History	Diagnostic	Firmware Upload
Upload firmware.				
Note:				
	or damage to your system, V	•		
use only the SOIN	Y upgrade software.			
File Name			Browse	
			_	
Status	Please choose a file			
	The	library unit will	reboot after bei	ng updated.
				pload

- **4** In the "File Name" box, enter the file name (in full path) of the firmware. Also, you can click the "Browse" button to specify the file.
- **5** Click "Upload".

A confirmation message appears.

Microsoft	Internet Explorer	
?	Ensure that the Library is not doing a backup or restore before proceeding. Press OK to upload new firmware to the Library. Press Cancel to abort firmware upload.	
	NOTE: The Library will reboot after the upload is completed. Reboot the Library host after the Library reboot has completed.	
	Cancel	

**6** Click "OK".

Starts to upload the firmware. When the upload is finished, the AIT library restarts automatically. 7 When the AIT library has restarted, click "Refresh" in your browser, and then make sure that the Library Administration Menu appears normally.

If the Library Administration Menu appears normally, the upload is complete.

When the firmware upload is finished, it is recommended to restart the library.

If the Library Administration Menu does not appear normally, restart the library again.

#### Caution

- Do not turn off the power of the AIT library while the firmware is being updated.
- The Library Administration Menu cannot be operated while the firmware is being updated.

## **Information Menu**

In the Information Menu, information about the AIT library, the AIT drives and the cartridges can be viewed.

The following items are in the Information Menu:

- Information
- Displays information related to the AIT library and AIT drives.
- Inventory
  - Displays information related to the cartridges.

## Information

In "Information", the following information related to the AIT library and AIT drives is displayed:

- Vendor ID
- Product ID
- Revision
- Serial number

### Note

Information related to the AIT library and the AIT drives can also be viewed in the Information Menu of the control panel.

1 In the Library Administration Menu, click "Information". You can also directly click "Information", which is located above "Information".

The "Information" page appears.

	Information		Inventor	/
Library	<b>Vendor ID</b> SONY	Product ID	Revision	Serial No 12345678
Drive	SONY	SDX-700C	01ni	4892576

## Inventory

In "Inventory", the following information related to the cartridges is displayed: • The setting condition of the cartridges

- You can find out in which slot or AIT drive the cartridge is set.
- Bar code information When the AIT library is equipped with a bar code reader, you can view the bar code information about the set cartridges by slots and AIT drives.
- R-MIC information For AIT-5, AIT-4, AIT-3 Ex, and AIT-3 cartridges, you can view the R-MIC information about the set cartridges by slots and AIT drives.

### Note

Information related to the cartridges can also be viewed in the Tape Inventory Menu of the control panel.

1 In the Library Administration Menu, click "Information", then click "Inventory". You can also directly click "Inventory", which is located above "Information".

The "Inventory" page appears.

	Informat	tion	Inventory
	Ba	rcode	R-MIC
Slot 01	♦ 🔽		
Slot 02			
Slot 03			
Slot 04			
Slot 05			
Slot 06			
Slot 07			
Slot 08			
Drive			

- For the slots and AIT drives that have cartridges, 🥎 is displayed.
- When the AIT library is not equipped with a bar code reader or a cartridge with no bar code information is set, nothing is displayed.
- If a cartridge with no R-MIC information is set, nothing is displayed.

# Appendix

## If You Forget the Password

If you forget the password, you will not be able perform configurations and operations that require the password. If you forget the password, contact the Service and Support Center.

## **Changing the Air Filter 1**

- Depending on the shape of the front panel, the air filter and method for changing the air filter may differ.
- Once a year, change the air filter of the AIT library. Contact your dealer if you wish to buy additional air filters.

Air Filter: Model number ACY-FL81

### Note

Make sure to clean the air filter once every three months.

- **1** Prepare a new air filter.
- **2** Turn off the AIT library power.

3 Use something thin like a precision screw driver to press button on the side of the library.



The end of the air filter is slightly ejected.



4

- 5 Insert the new air filter.

Push it in until it clicks into place.

6 Change the other filter using the same steps.

## **Changing the Air Filter 2**

- Depending on the shape of the front panel, the air filter and method for changing the air filter may differ.
- Once a year, change the air filter of the AIT library. Contact your dealer if you wish to buy additional air filters.

Air Filter: Model number ACY-FL81-OB (for Black Bezel) ACY-FL81-OW (for White Bezel)

### Note

Make sure to clean the air filter once every three months.

- **1** Prepare a new air filter.
- **2** Turn off the AIT library power.
- **3** To remove the air filter, put your finger on the rough part of the air filter port and slide the filter horizontally.



**4** Insert the new air filter.

Push it in until it clicks into place.

**5** Change the other filter using the same steps.

## Troubleshooting

Before contacting a Sony Service center, please check the following items. If the problem persists, contact a Sony Service center.

## The AIT library does not work.

- Verify that the power switch is turned on.
- Verify that the power cable is connected correctly.
- Verify that the shutter of the cartridge dock is closed.
- Verify that the terminator is attached correctly.
- Verify that the SCSI cable is correctly connected from the AIT library to the host computer.
- Verify that the power of the host computer is turned on.
- Verify that an error code is displayed on the LCD panel of the AIT library. For information about error codes, refer to the "Error Code List" (page 98) in this chapter.
- Verify that 10 seconds after restart the power is turned on.
- After restarting the library, when "Error 07000001" appears, press the [CANCEL] button twice, then on the "Configuration" menu, set "Barcode" to "NO". Restart the library. When the AIT library is not equipped with a bar code reader and the bar code setting is "YES", an error appears when the library starts or a cartridge is set.
- If an error appears when you turn on the power for the first time after installing the AIT library, verify the rear of the AIT library to make sure that the transport screw was removed from the Shipping position (upper hole).
   →"Unpacking" (page 13) in Chapter 2, "Installation".
- Try disconnecting the network cable, if connected.

## The AIT library and the host computer cannot communicate with each other.

- Verify that the SCSI IDs of the AIT library, AIT drives, and host computer are unique. Duplicate SCSI IDs cannot be used on one SCSI bus. → "Setting the SCSI ID" (page 23) in Chapter 2, "Installation".
- Verify that the SCSI cable is connected correctly. → "Connecting to the Host Computer" (page 17) in Chapter 2, "Installation".
- Verify that the SCSI adapter card is correctly installed in the computer.
- Verify that all the connected SCSI devices are LVD devices. The AIT library is an LVD device. Do not connect an HVD device to the library.
- Verify that all the devices on the SCSI bus are Wide SCSI devices. The AIT library is a Wide SCSI device. All the devices on the SCSI bus must be Wide SCSI devices. (Wide-Narrow adapters can also be used.)
- Make the length of the SCSI cable, which connects the host computer and the device at the end of the SCSI bus, shorter than 10 meters (32 ft. 9.7 in.).
- Verify that the SCSI bus is terminated correctly. → "SCSI Specifications" (page 96) in this chapter.
- Verify that the AIT library supports the application software. For guidance on application software that can be used with the AIT library and on supported operating systems, contact your dealer.
- Verify that the application software is correctly installed and correctly setup on the host computer.

- Verify whether the host computer was turned on less than 10 seconds after turning on the library. If the host computer is turned on too soon after turning on the library, the host computer may not detect the SCSI devices. When using DHCP, wait a least 30 seconds.
- If the "DHCP" setting on the "Network" menu is "YES", try changing the setting to "NO". →"Connecting to the Network" (page 29) in Chapter 2, "Installation".

## Data cannot be written or read even though the application and the library are working properly.

- Verify that the erase-protection tab of the cartridge is set to writable.  $\rightarrow$  "Preparing the Cartridge" (page 25) in Chapter 2, "Installation".
- Use only Sony's AIT cartridges. Also check whether the AIT drive supports the cartridges.
- If a cartridge has been used for a long time or very frequently, replace it with a new cartridge.
- Verify that the cartridge is not damaged.
- Try cleaning the AIT drive. → "Cleaning the AIT Drive" (page 63) in Chapter 5, "Operating the AIT Drive".

## The cartridges cannot be taken out.

Follow the instructions in "Taking Out the Cartridges" (page 50) in Chapter 4, "Operating the AIT Library".

If you are still unable to take out the cartridge, please contact your dealer for assistance.

## The bar code cannot be read.

- Verify that the bar code label is affixed properly so that the numbers are at the top. → "Preparing the Cartridge" (page 25) in Chapter 2, "Installation".
- Verify that the surface of the bar code label is free from dust and dirt.

## Miscellaneous

- Verify the shutter of the cartridge dock is closed tightly.
- When you set or remove a cartridge and "Error 07000001" appears, then on the "Configuration" menu, set "Barcode" to "NO". Restart the library. When the AIT library is not equipped with a bar code reader and the bar code setting is "YES", an error appears when a cartridge is set or ejected.
- Perform a diagnostic test on the AIT library. → "Diagnostic" (page 82) in Chapter 6, "Using the Library Administration Menu".

## **Transporting the AIT Library**

If you are transporting the AIT library for any reason, such as moving offices or repairing the library, make the following preparations:

• Take out all the cartridges set in the AIT library. If the cartridges cannot be taken out by operating the control buttons, refer to "The cartridges cannot be taken out." (page 93) in the "Troubleshooting" section to take out the cartridges.

- To turn off the power to the AIT library, perform the shutdown procedure described in "Turn the Power Off" (page 21) in Chapter 2. After pressing the front power standby switch, press the power switch on the rear of the AIT library. When you shut down the AIT library from the control panel, the internal mechanism moves to the appointed position, then the power enters the standby state.
- Remove all the cables such as the power cable, the SCSI cable, the terminator and the network cable.
- When packing, perform the unpacking procedure on "Unpacking" (page 13) in Chapter 2 in reverse. Be sure to fasten the transport screw.

## **Hardware Specifications**

## Hardware

#### AIT Drive

LIB-81/A5: SDX-1100 series (1)
LIB-81/A4: SDX-900 series (1)
LIB-81/A3X: SDX-800 series (1)
LIB-81/A3: SDX-700 series (1)
LIB-81/A2: SDX-500 series (1)
LIB-81/A1: SDX-400 series (1)
Number of drives that can be installed
One drives
Number of cartridges that can be set
Maximum of 8 volumes
Data transfer rate (sustained, no compression)
I IB 81/15 models

LIB-91/A3	models

Cartridge	Transfer rate
AIT-5	24 MB/s
AIT-4	24 MB/s
AIT-3 Ex	18 MB/s
AIT-3	16 MB/s

#### LIB-81/A4 models

Cartridge	Transfer rate
AIT-4	24 MB/s
AIT-3 Ex	18 MB/s

### LIB-81/A3X models

LID-01/A3A mouels	
Cartridge	Transfer rate
AIT-3 Ex	18 MB/s
AIT-3	16 MB/s
AIT-2 Turbo	16 MB/s
AIT-2	16 MB/s
AIT-1 Turbo	16 MB/s
AIT-1	11 MB/s
AIT-E Turbo	6 MB/s

LIB-81/A3	models
-----------	--------

Cartridge	Transfer rate
AIT-3	12 MB/s
AIT-2	12 MB/s
AIT-1	8 MB/s

## LIB-81/A2 models

Cartridge	Transfer rate
AIT-2	6 MB/s
AIT-1	4 MB/s

### LIB-81/A1 models

Cartridge	Transfer rate
AIT-1	4 MB/s

(Transfer rates depend on the operating system of the server to which the library is connected.)

which the nor	ary is connected.)
LCD panel	21 characters $\times$ 4 rows
LED	Two lamps
External conn	ectors
SCSI	Ultra 160/m SCSI,
	Wide Ultra LVD SCSI-compliant High Density 68 pins (2)
Ethernet	10Base-T/100Base-TX (RJ-45) (1)
RS232C	D-sub 9 pin (1, unused.)
Operating env	•
1 0	Temperature: 10 ℃ to 35 ℃
	Humidity: 20% to 80%
	(Avoid condensation)
Power	AC240 V to 100 V +10%/-10% (50/60 Hz)
	AC240 V to 100 V +10%/-10% (50/60 Hz)
Power Power consun	nption
	nption AIT-5 Model 55 W (Max) AIT-4 Model 55 W (Max)
	nption AIT-5 Model 55 W (Max) AIT-4 Model 55 W (Max) AIT-3 Ex Model 55 W (Max)
	nption AIT-5 Model 55 W (Max) AIT-4 Model 55 W (Max) AIT-3 Ex Model 55 W (Max) AIT-3 Model 55 W (Max)
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Mass

## **Data Storage Capacity**

## When using 8 cartridges, 2.6:1 data compression

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• AIT-5 246 m cartridge:	8320 GB of data
• AIT-4 246 m cartridge:	4160 GB of data
• AIT-3 Ex 186 m cartridge:	3120 GB of data
• AIT-3 230 m cartridge:	2080 GB of data
• AIT-2 Turbo 186 m cartridge:	1660 GB of data
• AIT-2 230 m cartridge:	1040 GB of data
• AIT 1 220 m contrideou	728 CP of data

13.5 kg (29.8 lb.)

### When using 8 cartridges, without compression

- AIT-5 246 m cartridge: 3200 GB of data
- AIT-4 246 m cartridge: 1600 GB of data
- AIT-3 Ex 186 m cartridge: 1200 GB of data
- AIT-3 230 m cartridge: 800 GB of data
- AIT-2 Turbo 186 m cartridge: 640 GB of data
- AIT-2 230 m cartridge: 400 GB of data
- AIT-1 230 m cartridge: 280 GB of data

Please note: Due to constant improvements, the specifications and outward appearance of the AIT library may change without notice.

## **Optional Accessories (sold separately)**

Rack Mounting Kit : Model numberACY-RK81Bar Code Label: Model numberACY-BL60A

## **SCSI Cable and Terminator Specifications**

## **SCSI Cable**

Use an Wide Ultra LVD SCSI cable that conforms to SCSI-3 specifications. However, when using a model equipped with the AIT-5, AIT-4, AIT-3 Ex or AIT-3 drive, use an Ultra 160/m SCSI LVD cable.

## **SCSI Cable Length**

The total allowable length of SCSI cables used in one LVD SCSI bus included the length of all internal and external cables is 12 meters (39 ft. 4.4 in.). The length of the AIT library internal cable is 2 meters (78.7 in.).

## **SCSI Specifications**

This section describes common specifications of SCSI components and SCSI buses.

## **About SCSI Components**

The SCSI system is composed of the following components.

	<ul> <li>Initiator This is the host computer system used to transfer commands. The system consists of the application software, the operating system, the device driver, the SCSI adapter card, etc.</li> <li>Bus By connecting the SCSI cables to the SCSI adapter card, the library and other devices, a path (or a bus) is created for transferring commands.</li> <li>Targets The AIT library and the AIT drive are peripheral devices (or targets) that receive commands from the host computer. Up to 16 devices (including the host computer) can be connected to the Wide SCSI bus. Also, up to 8 devices can be connected to the Narrow SCSI bus.</li> </ul>
About SCSI Bus	
	When you are setting up the AIT library using a SCSI bus, please note the following precautions
LVD SCSI	
	The AIT library is an LVD SCSI device. All SCSI devices connected to the AIT library on the SCSI bus must be LVD SCSI devices.
Wide SCSI	
	The interface of the AIT library is Wide SCSI. In order to connect the AIT library to a Narrow SCSI bus, use a 50-pin to 68-pin LVD SCSI adapter. Also, make sure every unused data lines are terminated by an adapter.
SCSI ID	
	Set a unique SCSI ID for each device on a SCSI bus. The host computer uses these SCSI IDs to differentiate between the devices. Also, the SCSI IDs are used to prioritize the order of communication when several devices are communicating with the host computer.
	SCSI ID number priority
	7     6     5     4     3     2     1     0     F     E     D     C     B     A     9     8       High ←     Low
	<b>Caution</b> The SCSI ID of a device has nothing to do with its physical location.
SCSI Bus Termination	
	If the AIT library is the device connected to the end of the SCSI bus, you must attach a terminator to the unused SCSI connector to terminate the SCSI bus. The

AIT library can supply electric power to the terminator. For information about

details, refer to "Setting the DIP Switches" (page 18) in Chapter 2,

"Installation".

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## **Error Code List**

When an error occurs in the AIT library, an error code appears on the LCD panel. The following is a list of error codes that are displayed on the LCD panel. When an error code appears, contact your dealer.

### **Changer Manager Errors**

Error code	Description	
01000031	An internal error occurred in the library.	
01000032	An internal error occurred in the library.	
01000033	Access attempted to a non-existent AIT drive. The AIT drive may not be connected correctly.	

### **NVRAM Driver Error**

Error code	Description	
02000001	An internal error occurred in the library.	
02000002	Could not read/write NVRAM.	

#### Mechanical Manager Error (Byte2:Axis, Byte1:Class, Byte0:SubClass)

Error code	Description	1
03010101	PickerAxis	Timeout occurred during Close Sensor Low Wait.
03010201	PickerAxis	Timeout occurred during Open Sensor Low Wait.
03010901	Picker sense	or malfunction.
03010A01	PickerAxis	The tape check sensor is not normal.
03020101	SliderAxis	Timeout occurred during Origin Sensor Low Wait.
03020102*	SliderAxis	Timeout occurred during Origin Sensor High Wait.
03020201	SliderAxis	Timeout occurred during Position Sensor Low Wait.
03020202	SliderAxis	Timeout occurred during Position Sensor High Wait.
03020501*	SliderAxis	Destination not reached.
03020601	SliderAxis	Fine tuning not possible.
03020701	SliderAxis	Cartridge cannot be removed.
03020801	SliderAxis	Cartridge not properly inserted in the drive.
03050101	TableAxis	Timeout occurred during Origin Sensor Low Wait.
03050102	TableAxis	Timeout occurred during Origin Sensor High Wait.
03050201	TableAxis	Timeout occurred during Position Sensor Low Wait.
03050202	TableAxis	Timeout occurred during Position Sensor High Wait.
03050401	TableAxis	The Position Sensor is not normal.

### Mechanical Manager Error (Byte2:Axis, Byte1:Class, Byte0:SubClass) (Continued)

Error code	Description	
03050402	TableAxis	The Position Sensor is not normal. (Origin was not detected.)
03050501	TableAxis	Destination not reached.
03050601	TableAxis	Fine tuning not possible.
03060101	ShutterAxis	Timeout occurred during Close Sensor High Wait.
03060201	ShutterAxis	Timeout occurred during Open Sensor High Wait.
03060901	Shutter sens	or malfunction.

\* Verify that the transport screw was removed from the Shipping position.  $\rightarrow$  "Unpacking" (page 13) in Chapter 2, "Installation".

### **Mechanical Control Errors**

Error code	Description
04000002	MechaCon Parameter is incorrect.
04000003	MechaCon Aborted.
04000004	MechaCon More than 8 tape volumes present. Remove extra cartridges from the library.
04000005	MechaCon Cannot detect tape.
040000A0	MechaCon Element address is incorrect.
040000A1	MechaCon Element address does not exist.

#### AIT drive Errors:

Error code	Description
06000001	The drive status is not normal.
0600002	The drive SCSI ID was not set properly.
06000061	The drive cannot load the cartridge.

### Bar code Errors\*:

Error code	Description
07000001	A communication error occurred in the bar code reader.
0700002	A read error occurred in the bar code reader.

- \* Verify that the bar code settings are correct. → "Setting the Bar Code" (page 44) in Chapter 3, "Basic Usage".
  - Verify that the bar code label is affixed properly.  $\rightarrow$  "Preparing the Cartridge" (page 25) in Chapter 2, "Installation".

#### **R-MIC Error:**

Error code	Description
08000001	Could not receive data from R-MIC.
08000002	Transfer failure due to internal parameter error.
08000003	Data from R-MIC incorrect.
08000004	An R-MIC error occurred.
0800005	Internal memory error.

#### Ethernet Error:

Error code	Description
0900001	An Ethernet error occurred.

## **Other Messages**

Warning Message	Description
Cleaning Request	The AIT drive needs cleaning. Refer to "Cleaning the AIT Drive" (page 63).
Cleaning Tape at EOM	The spent cleaning cartridge is set. Replace the spent cleaning cartridge with a new one.
Clean failure	Cleaning failed. Repeat the cleaning procedure.

When the following messages appear, perform the prescribed actions.

Warning Message	Description
Drive information XX	If the XX code is 3x, 4x, 5x, or 72, insert a new AIT data cartridge into the library after cleaning the drive.* For details, refer to "Cleaning the AIT Drive" (page 63). If the XX code is CE, see the explanation below. If the XX code is a code other than those explained above, contact your dealer.
Drive information CE	The cleaning cartridge is exhausted. Replace it with a new one and clean the drive again.
or	
Cleaning Tape at EOM	
Please check the transport screw	The transport screw may still be fastened in place. Refer to "Unpacking" (page 13).

\* If the message "Drive information F8" appears on the display, the cartridge being used may not be the correct one. Check the type of cartridge being used. To remove the loaded cartridge, select "3. Move Tape" in the menu and move the cartridge from the drive to the library slot. Select "2. Eject/Insert Tape", and then "1. Eject from Library" to remove the cartridge.

When the following messages appear, contact your dealer.

Warning Message	Description
Threshold condition Turn Table	The turn table has operated more than the specified number of times.
Threshold condition Slider	The slider has operated more than the specified number of times.
Threshold condition Picker	The picker has operated more than the specified number of times.
Threshold condition Shutter	The shutter has operated more than the specified number of times.
Threshold condition Drive Load	The cartridges have loaded in the drive more than the specified number of times.
Threshold condition Fan	The fan has operated more than the specified number of times.
Fan 1 trouble	Fan 1 malfunction.
Fan 2 trouble	Fan 2 malfunction.
Fan 3 trouble	Fan 3 malfunction.
Fan 1-3 trouble	Fan 1, Fan 2 and Fan 3 malfunction.

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## W

For information about the AIT library, refer to your reseller.