Tabletop 8mm Cartridge Tape
Subsystem

Installation

⋝Exabyte®

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Revision History

Previous revisions of this manual include the following:

Revision	Date
000	Jan 1990 (initial release)
001	Feb 1991

For information about the changes and enhancements to this revision, refer to page vi.

Product Warranty Caution

The Tabletop CTS is warranted to be free from defects in materials, parts, and workmanship and will conform to the current product specification upon delivery. **For the specific details of your warranty, refer to your sales contract or contact the company from which the Tabletop CTS was purchased.**

The warranty for the Tabletop CTS shall not apply to failures of any unit when:

■ The Tabletop CTS is repaired by anyone other than the Manufacturer's personnel or approved agent.

■ The Tabletop CTS is physically abused or is used in a manner that is inconsistent with the operating instructions or product specification defined by the Manufacturer.

■ The Tabletop CTS fails because of accident, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, modification, or service by anyone other than the factory service center or its approved agent.

■ The Tabletop CTS is repaired by anyone, including an approved agent, in a manner that is contrary to the maintenance or installation instructions supplied by the Manufacturer.

■ The Manufacturer's serial number tag is removed.

■ The Tabletop CTS is damaged because of improper packaging on return.

CAUTION

Returning the Tabletop CTS in unauthorized packaging may damage the unit and void the warranty.

If you are returning the Tabletop CTS for repair, package it in its original packaging (or in replacement packaging obtained from your vendor). Refer to the packing instructions in this manual.

If problems with the Tabletop CTS occur, contact your maintenance organization; do not void the product warranty by allowing untrained or unauthorized personnel to attempt repairs.

FCC Notice

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 when the equipment is operated in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, 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.

Shielded cables are required for this device to comply with FCC Rules. **Use shielded cables when connecting this device to others.**

VDE Notices

Bescheinigung des Herstellers/Importeurs: Hiermit wird bescheinigt, daβ das Tabletop CTS in Übereinstimmung mit den Bestimmungen der Vfg 523/1969 und Vfg 1046/1984 funkentstört ist. Der Deutschen Bundespost wurde das Inverkehrbringen dieses Gerätes angezeigt und die Berechtigung zur Überprüfung der Serie auf Einhaltung der Bestimmungen eingeräumt. Die Einhaltung der betreffenden Bestimmungen hängt von der Verwendung abgeschirmter Kabel ab. Für die Beschaffung entsprechender Kabel ist der Betreiber verantwortlich.

Dieses Gerät wurde sowohl einzeln als auch in einer Anlage, die einen normalen Anwendungsfall nachbildet, auf die Einhaltung der Funkentstörbestimmungen geprüft. Es ist jedoch möglich, daβ die Funkentstörbestimmungen unter ungünstigen Umständen bei anderen Gerätekombinationen nicht eingehalten werden. Der Betreiber ist für die Einhaltung der Funkentstörbestimmungen seiner eigenen Anlage verantwortlich, in der dieses Gerät betrieben wird.

English Translation:

Certificate by Manufacturer/Importer: This is to certify that the Tabletop CTS is shielded against radio interference in accordance with the provisions of Vfg 523/1969 and Vfg 1046/1984. The German Postal Services have been advised that this device is being put on the market and that they have been given the right to inspect the series for compliance with the regulations. Compliance with applicable regulations depends on the use of shielded cables. It is the user who is responsible for procuring the appropriate cables.

This equipment has been tested concerning compliance with the relevant RFI protection requirements both individually and on system level (to simulate normal operation conditions). However, it is possible that these RFI requirements are not met under certain unfavorable conditions in other installations. It is the user who is responsible for compliance of his particular installation.

CSA Notice

Le present appareil numerique n'emet pas de bruits radioelectriques depassant les limites applicables aux appareils numeriques de Classe B prescrites dans le reglement sur le brouillage radioelectrique edicte par le Ministere des Communications du Canada.

English translation:

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the radio interference regulations of the Canadian Department of Communications.

Changes and Enhancements to This Manual

This revision of *Tabletop 8mm Cartridge Tape Subsystem Installation* includes the following changes and enhancements:

■ New drawings to reflect changes to fan guard

■ Deleted references to fan filter (fan filter no longer used)

■ Corrected the fuse size to $\frac{1}{4}$ $1\frac{1}{4}$ inch

■ Updated regulatory and safety agency standards

■ Changed format of tables

Contents

Figures

Tables

1 Introduction

This manual provides information about installing, operating, and maintaining the EXABYTE® Tabletop 8mm Cartridge Tape Subsystem.
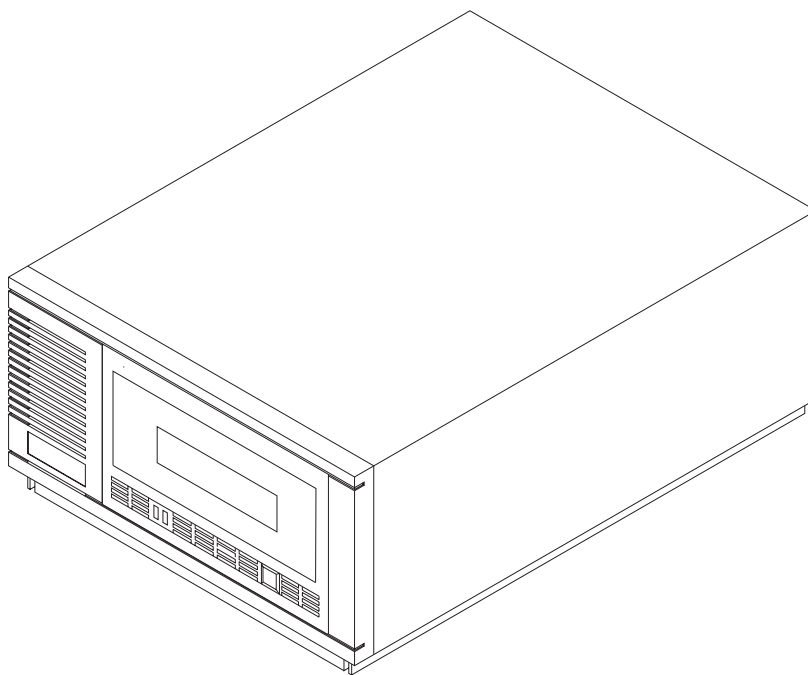
1.1 About the Tabletop Cartridge Tape Subsystem

The Tabletop Cartridge Tape Subsystem (Tabletop CTS) is an 8mm cartridge tape subsystem with its own housing and power supply. Accommodating a single EXABYTE 8mm Cartridge Tape Subsystem (CTS), the Tabletop CTS offers up to 2.5 gigabytes of tape storage with an EXB-8200 or EXB-8200SX installed or up to 5 gigabytes of tape storage with an EXB-8500 installed.

The Tabletop CTS provides a high-performance, easy-to-implement solution for high-capacity data storage. Because it comes with its own housing and power supply, the implementor does not have to spend additional development time designing an enclosure and obtaining agency approval.

The Tabletop CTS is available in single-ended or differential SCSI configurations.

For more information about EXABYTE's 8mm Cartridge Tape Subsystems, refer to the appropriate manuals listed in Section 1.3.

Figure 1-1 Tabletop Cartridge Tape Subsystem

1.2 About This Manual

This manual provides step-by-step instructions for installing, operating, and maintaining the Tabletop CTS. It contains the following information:

■ Chapter 2 describes how to install and operate the Tabletop CTS, including connecting the Tabletop CTS to the SCSI bus and performing the initial power-on.

■ Chapter 3 describes the preventive maintenance and repair activities that can be performed by the operator or end user of the Tabletop CTS. It provides procedures for cleaning the CTS and replacing the fuse and power cord.

■ Chapter 4 describes the procedure for packing and shipping the Tabletop CTS.

■ Appendix A lists the requirements for the power cord.

■ Appendix B lists the requirements for the SCSI cable.

■ A glossary, index, and reader's comment form are included at the back of the manual.

1.3 Related Publications

This manual contains the information needed to install, operate, and maintain the Tabletop CTS. For further information about the Tabletop CTS, the EXB-8200, EXB-8200SX, EXB-8500, and the standards used, refer to the publications listed in this section.

Tabletop CTS
For more information about the Tabletop CTS, refer to the following:

■ *Tabletop 8mm Cartridge Tape Subsystem Product Specification*, 510100

Cartridge Tape Subsystems
For more information about the EXB-8200, EXB-8200SX, and the EXB-8500, refer to the following:

■ *EXB-8200 8mm Cartridge Tape Subsystem Product Specification*, 510005

■ *EXB-8200 8mm Cartridge Tape Subsystem User's Manual*, 510006

■ *EXB-8200SX 8mm Cartridge Tape Subsystem Product Specification and User's Manual*, 510011

■ *EXB-8500 8mm Cartridge Tape Subsystem Product Specification*, 510200

■ *EXB-8500 8mm Cartridge Tape Subsystem User's Manual*, 510201

Standards

For more information about the standards used, refer to the following:

■ ANSI *Small Computer System Interface (SCSI)*, X3.131-1989

■ ANSI *Small Computer System Interface-2 (SCSI-2)*, X3T9/89-042

■ ANSI *Helical-Scan Digital Computer Tape Cartridge* X3B5/89-136, Rev. 6

1.4 Regulatory and Safety Agency Standards

The Tabletop CTS complies with and is certified to the applicable requirements of the following domestic and international product safety standards:

■ UL Standard 478, 4th Edition, Electronic Data Processing Units and Systems

■ CSA Standard C22.2 No. 220-M1986, Information Processing and Business Equipment

■ IEC 950/EN60950, Safety of Information Technology Equipment, including Electrical Business Equipment (TUV)

When properly installed with shielded cables and adequate grounding of the SCSI bus and the input power, the Tabletop CTS meets the requirements for radiated emissions as defined by the following standards:

■ FCC Rules, Part 15, Class B Computing Devices

■ Canadian Department of Communications, Radio Interference Regulation, Digital Apparatus, Class B

■ VDE Vfg 1046/1984, Class B

■ CISPR Publication 22, 1985, Class A

1.5 Other Test Standards

When shipped, the Tabletop CTS is packaged in a manner that complies with the testing criteria defined by National Safe Transit Association (NSTA) Project 1A.

2 Installing the Tabletop CTS

This chapter includes step-by-step instructions for installing the Tabletop CTS. Installing the Tabletop CTS includes the following steps:

- Unpacking the Tabletop CTS
- Setting the SCSI ID
- Connecting the Tabletop CTS to the SCSI bus
- Connecting power to the Tabletop CTS
- Performing the initial power on

2.1 Requirements for Installing the Tabletop CTS

The Tabletop CTS should be installed on a level surface near a readily accessible outlet.

WARNING

The primary disconnect device is considered to be the power cord plug. For this reason, install the Tabletop CTS near an outlet that is readily accessible.

VORSICHT

Die Hauptnetztrennfunktion wird durch den Netzstecker übernommen. Aus diesem Grund schließen Sie bitte das Tabletop CTS an eine leicht zugängliche Steckdose an.

2.2 Required Equipment and Tools

To install the Tabletop CTS, you need the following equipment:

Equipment Provided by EXABYTE
- Tabletop CTS.

- Seven-foot, three-conductor AC power cord (supplied with Tabletop CTSs for 120 volt use within the United States and Canada).

  Note: If you will use an input voltage other than 120 volts AC or if you will use the Tabletop CTS outside of the United States or Canada, you must supply your own power cord. For information about the requirements for the power cord, refer to Appendix A.

Equipment You Must Provide

■ AC power cord for international use or for use with input voltages other than 120 volts AC (see Appendix B for detailed specifications).

■ SCSI cable (see Appendix B for detailed specifications).

■ External SCSI bus terminator, if the Tabletop CTS is the last device on the SCSI bus.

To comply with FCC regulations, the Tabletop CTS cannot be terminated internally. You must provide your own external terminator. To ensure that the Tabletop CTS performs to specification, EXABYTE recommends the following external terminators:

❏ Single-ended external terminator (EXABYTE part number 002201):

— Amphenol® 200-1S000-02000-00000
— Methode Electronics, Inc. dataMate® DM800-09-0

❏ Differential external terminator (EXABYTE part number 002202):

— Amphenol 200-2S000-02000-00000
— Methode Electronics, Inc. DM800-08-0

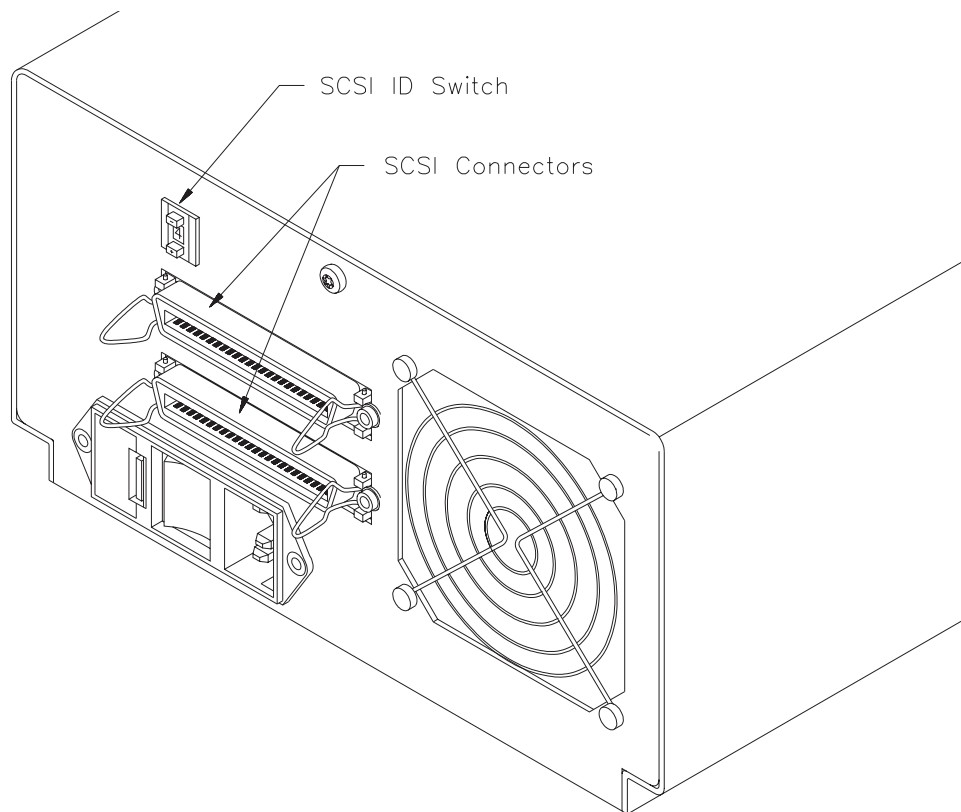## 2.3 Unpacking the Tabletop CTS

To unpack the Tabletop CTS, follow these steps:

1. Place the shipping carton on a flat, level surface.

2. Remove the adhesive tape from the top of the carton and open the carton flaps.

3. Carefully remove the packing material from the top of the Tabletop CTS.

4. Holding the bottom edges of the Tabletop CTS, lift it out of the carton and place it on a flat, level surface.

5. Check the contents of the carton against the packing list and inspect the Tabletop CTS for possible damage. If a part is missing or the Tabletop CTS is damaged, notify the carrier and your vendor immediately.

6. Let the Tabletop CTS acclimate to the operating environment for at least two hours before applying power.

Note: If the Tabletop CTS has been stored for six months or more, follow the instructions in Section 2.7 when applying power for the first time.

2.4   Setting the SCSI ID

Figure 2-1 shows the location of the SCSI ID switch and SCSI connectors on the back of the Tabletop CTS.

Figure 2-1 Location of SCSI ID Switch and Connectors

To set the CTS's SCSI ID using the switch on the back of the Tabletop CTS:

■   Press the button labeled "+" to increase the address
■   Press the button labeled "–" to decrease the address

2.5 Connecting the Tabletop CTS to the SCSI Bus

Two SCSI connectors are located on the back of the Tabletop CTS so that multiple units can be connected in series for "daisy chained" configurations or to accommodate one cable and an external terminator if the Tabletop CTS is the last device on the SCSI bus.

To connect the Tabletop CTS to the SCSI bus, follow these steps:

1. Locate the two SCSI connectors on the back of the Tabletop CTS, as shown in Figure 2-1 on page 2-3.

2. If the Tabletop CTS is the last device on the SCSI bus, plug a SCSI cable into either one of the two connectors and the appropriate single-ended or differential external terminator into the other connector.

   or

   If the Tabletop CTS will not terminate the SCSI bus ("daisy chain" configuration), plug a SCSI cable into each connector. See Appendix B for an illustration of a daisy chain configuration.
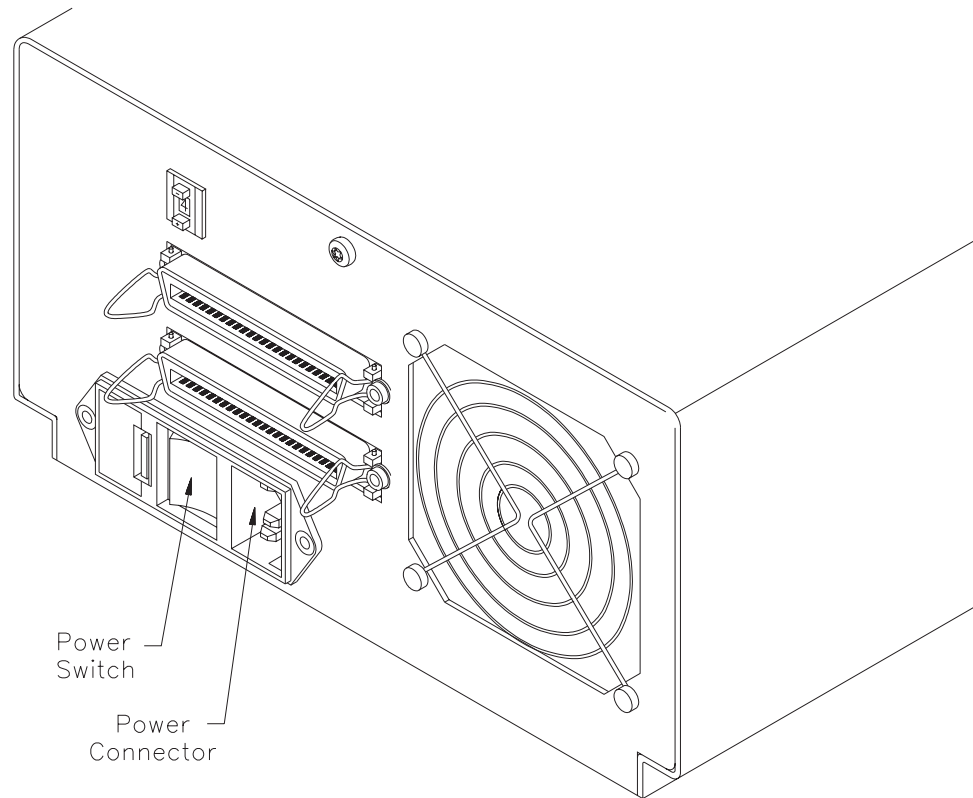
2.6 Connecting Power to the Tabletop CTS

The Tabletop CTS includes an internal power supply that is capable of accepting 120 or 240 volts AC at 50 to 60 Hz. The Tabletop CTS has autoranging voltage selection, so you do not need to change the voltage setting.

A three-conductor AC power cord is shipped with the Tabletop CTS for 120-volt use in the United States and Canada. If you are planning to use an input voltage other than 120 volts AC or if you will be using the Tabletop CTS outside of the United States or Canada, you must supply your own power cord. For information about the requirements for the power cord, refer to Appendix A.

To connect power to the Tabletop CTS, follow these steps:

1. Make sure that the power switch on the back of the Tabletop CTS is off. The switch is off when a 0 is visible on the left edge of the rocker switch.

   Figure 2-2 shows the location of this switch.

Figure 2-2 Location of Power Switch and Power Connector

2. Connect the female end of the power cord to the power connector on the back of the Tabletop CTS. To prevent possible power loss to the Tabletop CTS, make sure that the power cord is fully connected to the power connector.

3. Plug the male end of the power cord into the power source.

2.7 Performing the Initial Power-on

After you have connected the Tabletop CTS to the power supply, you can perform the initial power-on. As described in this section, the procedure for performing the initial power-on depends on whether the Tabletop CTS has been stored.

If the Tabletop CTS Has Been Stored for Less Than Six Months
If the Tabletop CTS has been stored for less than six months, performing the initial power-on involves the following steps:

1. Press the power switch on the back of the Tabletop CTS to the on position. The switch is on when the 0 is hidden on the left edge of the rocker switch. When power is turned on, the following activities occur (see Figure 2-3):

   ■ The power-on LED on the front of the Tabletop CTS is illuminated.

   ■ The cooling fan mounted at the back of the Tabletop CTS begins to rotate.

   ■ The CTS's power-on self-test is performed. For a description of what happens during this test, refer to the user's manual for the appropriate CTS.

2. If the Tabletop CTS does not power on as described in step 1, refer to Section 2.8.
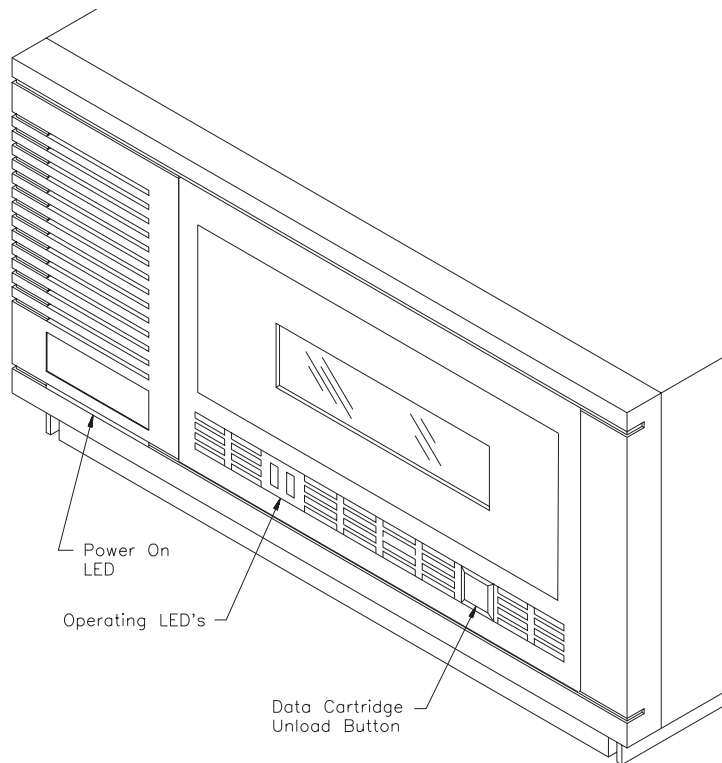
Figure 2-3 Location of Controls and Indicators (EXB-8200 shown)

If the Tabletop CTS Has Been Stored for Six Months or More

If the Tabletop CTS has been stored for six months or more, perform the following steps to ensure that the Tabletop CTS's internal lubrication is properly distributed:

1. Connect the Tabletop CTS to a suitable test system through the SCSI interface.

2. Press the power switch on the back of the Tabletop CTS to the on position. The switch is on when the 0 is hidden on the left edge of the rocker switch. When power is turned on, the following activities occur (see Figure 2-3):

    ■ The power-on LED on the front of the Tabletop CTS is illuminated.

    ■ The cooling fan mounted at the back of the Tabletop CTS begins to rotate.

    ■ The CTS's power-on self-test is performed. For a description of what happens during this test, refer to the user's manual for the appropriate CTS.

3. If the Tabletop CTS does not power on as described in step 2, refer to Section 2.8.

4. Press the unload button on the front of the Tabletop CTS and insert a data cartridge.

5. Push the door shut and wait while the CTS loads the tape and positions it at LBOT. This takes about 50 seconds.

6. Issue a WRITE command to write approximately 500 MBytes of data to the tape.

7. Issue a REWIND command to rewind the tape to LBOT.

8. Issue a READ command to read the data written on the tape in step 6.

9. Repeat steps 6 through 8 at least two times or for two hours (whichever is greater).

Note: If the Tabletop CTS has been stored for a long period, errors may occur during the break-in period. If an error occurs, reset the Tabletop CTS and repeat steps 5 through 9 as appropriate.

When you have completed step 9, the Tabletop CTS is ready for normal operation.

2.8 Failure to Power On

If the Tabletop CTS does not power on as described in Section 2.7, check the following:

■   If the power-on indicator is not illuminated, check the following:

❑   Is the power switch in the on position?
❑   Is the power cord inserted correctly?
❑   Is the fuse good? (See page 3-2.)
❑   Is the power source providing power?
❑   Is the Tabletop CTS connected to the SCSI bus? Is the SCSI bus properly terminated?

■   If the power-on indicator is illuminated, check to see that the host computer is turned on. If the host computer is turned on but the Tabletop CTS still does not power on correctly, contact your vendor.

■   If the LEDs on the front of the CTS flash alternately or if the amber light flashes, the CTS has failed its power-on self-test. The CTS door may also open. Contact your vendor if any of these conditions occur.

■   If the LEDs on the front of the CTS remain lit after 65 seconds, ensure that the SCSI bus is properly terminated.

■   If the fan on the back of the Tabletop CTS does not start rotating—or if it stops rotating—and all other power-on operations complete normally, turn off the Tabletop CTS and contact your vendor.

Notes:

3 Maintaining the Tabletop CTS

This chapter describes the preventive maintenance and repair activities that can be performed by the operator or end user of the Tabletop CTS. More extensive maintenance and repair activity must be performed only by authorized service personnel.

IMPORTANT

As described in the product warranty caution at the beginning of this manual, the Tabletop CTS's warranty does not apply to failures of the Tabletop CTS when the Tabletop CTS is repaired by untrained or unauthorized service personnel.

3.1 Cleaning the Cartridge Tape Subsystem

The CTS requires regular cleaning with an EXABYTE-approved 8mm Cleaning Cartridge. For information about how often to use the cleaning cartridge and step-by-step instructions for cleaning the CTS, refer to the documentation for the CTS.

IMPORTANT

Using cloth swabs, cotton swabs, or any cleaning agents other than an approved cleaning cartridge will void the warranty on the CTS.

3.2 Serviceable Parts

As described in this section, the parts listed in Table 3-1 can be replaced by the operator of the Tabletop CTS.

Table 3-1 Serviceable Parts

Part Number	Description
000050	Fuse: $\frac{1}{4}$ $1\frac{1}{4}$, 1.0 amp, 250 volt, slow blow
000053	AC power cord: 7-ft. (2.1 m), 3-conductor, for 120 volt use

All other parts must be serviced only by EXABYTE Corporation or by authorized service personnel.

Note: The Tabletop CTS is shipped with a seven-foot (2.1-meter), three-conductor AC power cord for 120 volt use in the United States and Canada. If you are planning to use an input voltage other than 120 volts AC or if you will be using the Tabletop CTS outside of the United States or Canada, you must supply your own power cord. Refer to Appendix A for a description of power cord requirements.

Replacing the Fuse

The Tabletop CTS uses a $\frac{1}{4}$ $1\frac{1}{4}$, 1.0 amp, 250 volt fuse. An extra fuse is located in the fuse drawer at the back of the Tabletop CTS.


WARNING

Before performing any of the following steps, be sure that the power switch is in the off position and the power cord is disconnected from the Tabletop CTS.

VORSICHT

Bevor Sie einen der folgenden Schritte ausführen, stellen Sie bitte sicher, daβ der Netzschalter ausgeschaltet und das Netzkabel vom Tabletop CTS getrennt ist.

To replace the fuse, follow these steps:

1. Locate the fuse drawer at the back of the Tabletop CTS (see Figure 3-1).
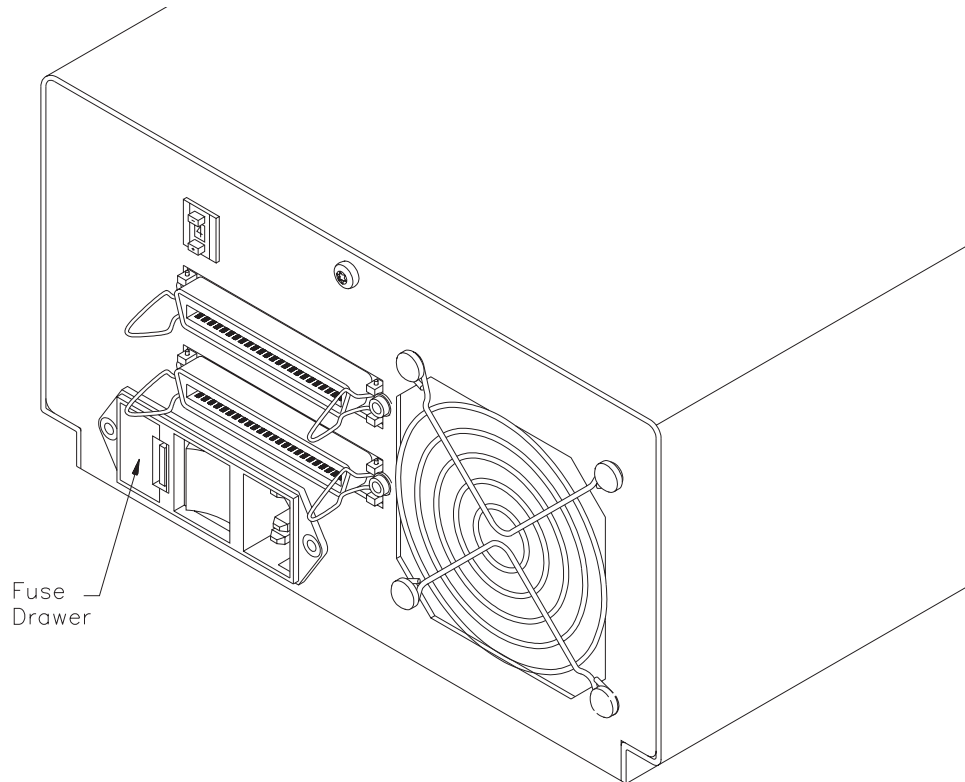
Figure 3-1 Location of Fuse Drawer

2. Grasp the sides of the fuse drawer with the thumb and forefinger of one hand. Depress the release clip on the right side of the drawer and pull the fuse drawer out.

3. Remove the old fuse from the fuse drawer and check to see if it has blown. If it has, replace it with the spare fuse in the drawer.

4. If necessary, put a new spare fuse in the drawer.

5. Replace the fuse drawer in the Tabletop CTS. Insert the open end of the fuse drawer first, with the release clip on the right. The release clip will snap into place when the fuse drawer is inserted properly.

Replacing the AC Power Cord

The Tabletop CTS is shipped with a seven-foot (2.1-meter), three-conductor AC power cord for 120 volt use in the United States and Canada. If you are planning to use an input voltage other than 120 volts AC or if you will be using the Tabletop CTS outside of the United States or Canada, you must supply your own power cord. Refer to A for a description of power cord requirements.

To replace the power cord for the Tabletop CTS, follow these steps:

1. Make sure that the power switch on the back of the Tabletop CTS is off. The switch is off when a 0 is visible on the left edge of the rocker switch.

2. Connect the female end of the power cord to the power connector on the back of the Tabletop CTS. To prevent possible power loss to the Tabletop CTS, make sure that the power cord is fully connected to the power connector.

3. Plug the male end of the power cord into the power source.

4 Packing and Shipping the Tabletop CTS

This chapter includes information for packing and shipping the Tabletop CTS.

4.1 Packaging and Shipping Requirements

The following materials are required to pack the Tabletop CTS:

- Original shipping container
- Two original cardboard and foam packing pieces
- Antistatic bag
- Packing tape
- Completed paperwork and shipping label

The Tabletop CTS shipping carton measures 19.5 inches long   16.5 inches wide   12 inches high (49.5   42   30.5 cm). A fully packed Tabletop CTS weighs 19 pounds (8.6 kg). The carton and internal packing pieces are designed so that the enclosed Tabletop CTS does not receive a shock greater than 45 g when the carton is dropped on any surface, corner, or edge from a height of 36 inches (92 cm) at a velocity change of 167 inches per second (424 cm per second).

CAUTION

To avoid damaging the Tabletop CTS and voiding your warranty, be sure to use the original shipping materials (or replacement materials obtained from your vendor) when repacking and shipping the Tabletop CTS. Do not use the shipping carton and packing materials to ship items other than or in addition to a Tabletop CTS.

4.2 Preparing the Tabletop CTS for Shipping

To prepare the Tabletop CTS for shipping, follow these steps:

1. Wait until operations are complete and remove the data cartridge from the CTS. Close the CTS door.

2. Turn the power switch off.

3. Remove the power cord, SCSI cables, and terminator from the back of the Tabletop CTS.

4. Put the Tabletop CTS into the antistatic bag and tape the bag closed.

4.3 Packing the Tabletop CTS

Once the Tabletop CTS is prepared for shipping, you can place it in the shipping carton. To pack the Tabletop CTS, follow these steps:

1. If necessary, reassemble the original shipping carton by taping the flaps shut at the bottom.

2. Place the larger foam and cardboard piece in the shipping carton with the rectangular cutout facing up.

3. Carefully lift the Tabletop CTS into the shipping carton and lower it onto the packing piece. Be sure that the Tabletop CTS is correctly seated in the carton.

4. Place the smaller packing piece on top of the Tabletop CTS with the foam facing up.

5. If necessary, place the power cord, manual, SCSI bus terminator, and other accessories for the Tabletop CTS on top of the cardboard and foam packing piece.

6. Ensure that the necessary paperwork is in the box and tape the box shut.

7. Place the shipping label on the box.

Appendix A Power Cord Requirements

This appendix describes the requirements for the power cord to be used with the Tabletop CTS. The Tabletop CTS is shipped with a seven-foot (2.1-meter), three-conductor AC power cord for 120 volt use in the United States and Canada. The power cord has a molded NEMA 5-15P male connector on one end and a molded IEC type CEE-22 female connector on the other end. The power cord is UL Listed and CSA Certified.

WARNING

The primary disconnect device is considered to be the power cord plug. For this reason, install the Tabletop CTS near an outlet that is readily accessible.

VORSICHT

Die Hauptnetztrennfunktion wird durch den Netzstecker übernommen. Aus diesem Grund schließen Sie bitte das Tabletop CTS an eine leicht zugängliche Steckdose an.

Power Cord for Other Voltages and International Use

If you are planning to use an input voltage other than 120 volts AC or if you will be using the Tabletop CTS outside of the United States or Canada, you must supply your own power cord.

U.S. and Canadian 220 VAC Power Cord

The criteria for a U.S. and Canadian 220 volt AC power cord for the Tabletop CTS are as follows:

■ The power cord must have a molded NEMA 6-15P attachment plug on one end.

■ The power cord must have a molded IEC type CEE-22 female connector on the other end.

■ The cordage used must be an SJT type, three-conductor, 18 AWG minimum.

■ The power cord must comply with local electrical code.

A-2

International 220 VAC Power Cord

The criteria for an international 220 VAC power cord are as follows:

■ The power cord must have an attachment plug of the proper type, rating, and safety approval for the intended country.

■ The power cord must have an IEC type CEE-22 female connector on one end.

■ The cordage must be adequately rated and harmonized to CENELEC publication HD-21.

Appendix B SCSI Cable Requirements

This appendix describes the requirements for the cable needed to connect the Tabletop CTS to the SCSI bus.

Cable Specifications

To connect the Tabletop CTS to the SCSI bus, use a cable that meets the general specifications listed in Table B-1.

Table B-1 SCSI Cable Specifications

Standard Construction	50 conductors (25 twisted pairs with drain wire and shield)
Primary Conductors	Insulated per UL Style 1589
Gauge	#28 AWG minimum stranded (7/34) annealed
Insulation	Polypropylene (80°C) 0.010 inch nominal
Shielding	80% minimum tinned copper braid over aluminum/mylar foil
Outer Jacket	Insulated per UL Style 2919
Voltage Rating	30 VAC
Impedance	100 Ohms ±10% @ 1.5 MHz.
Attenuation	Less than 6 dB per 100 feet
Grounding	Case to case grounding

Cable Length

The maximum length of the SCSI cable depends on whether you are using a differential or single-ended SCSI configuration, as follows:

- For differential SCSI configurations, the maximum allowable bus length is 25 meters (82 feet).

- For single-ended SCSI configurations, the maximum allowable bus length is 6 meters (19.7 feet).

As Figure B-1 shows, each Tabletop CTS attached to the SCSI bus uses 0.4 meters (1.31 feet) of the total allowable bus length internally.
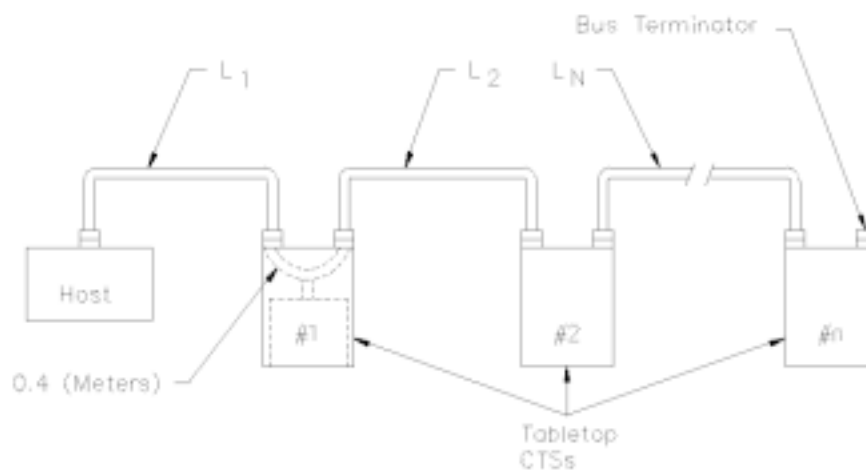
Figure B-1 Calculating SCSI Bus Length for Daisy-chained Tabletop CTSs

Therefore, to determine the allowable distance (in meters) between devices on the bus for a "daisy chained" configuration, use the following formula:

$$\text{Total Length} = L_1 + L_2 + \ldots + L_n + 0.4n$$

where:

L	= Length in meters between devices on the bus
n	= Number of devices on the bus
Total Length	= 6 meters maximum for single-ended configurations
	= 25 meters maximum for differential configurations

Glossary

address	A unique identifier assigned to each device or subsystem on the SCSI bus. Also referred to as the *SCSI ID*.
bus devices	Initiator or target devices connected to the SCSI bus.
byte	Eight bits or one character.
cm	Centimeter (0.3937 inches).
CSA	Canadian Standards Association.
EXB-8200	The EXB-8200 8mm Cartridge Tape Subsystem. The EXB-8200 can store up to 2.5 gigabytes of data on a single 8mm data cartridge.
EXB-8200SX	The EXB-8200SX 8mm Cartridge Tape Subsystem. The EXB-8200SX is very similar to the EXB-8200 but offers a high-speed search capability.
EXB-8500	The EXB-8500 8mm Cartridge Tape Subsystem. The EXB-8500 can store up to 5.0 gigabytes of data on a single 8mm data cartridge.
FCC	Federal Communications Commission.
GByte	Gigabyte or one billion bytes.
h	Hexadecimal (base 16) numbering system.
host	The computer system that acts as the initiator of a operation.
ID	Identification.
IEC	International Electrotechnical Commission.
initiator	A host computer system that requests an operation to be performed by a target.
KByte	Kilobyte or 1,024 bytes.
MByte	Megabyte or one million bytes.
mm	Millimeter (0.03937 inches).
NSTA	National Safe Transit Association.

POST   Power-on self-test, which is the process that occurs when the EXB-8500 performs its initial power-on diagnostics.

SCSI   Small Computer System Interface.

SCSI ID   A unique identifier assigned to each device or subsystem on the SCSI bus. Also referred to as the *address*.

target   A bus device (usually a controller) that performs an operation requested by an initiator. The EXB-8200, EXB-8200SX, and EXB-8500 are targets.

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