What to Do

Purpose

This installation guide explains how to slide mount a TZ875 mini-library into either an SW500 or SW800 cabinet (Figure 1).

Reference Documentation

Table 1 lists the documents referred to in this installation guide. Prior to installing the TZ875 mini-library, read the listed manuals that apply to your installation.

Table 1 Reference Documentation

<table>
<thead>
<tr>
<th>Title</th>
<th>Order/Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TZ875 5-Cartridge Tape Mini-Library, Owner’s Manual</td>
<td>EK–TZ875–OM. A01</td>
</tr>
<tr>
<td>StorageWorks Solutions, SW500-Series Cabinet, Installation and User’s Guide</td>
<td>EK–SW500–IG. D01</td>
</tr>
<tr>
<td>StorageWorks Solutions, SW800-Series Cabinet, Installation and User’s Guide</td>
<td>EK–SW800–IG. D01</td>
</tr>
<tr>
<td>StorageWorks Solutions, Configuration Guide</td>
<td>EK–BA350–CG. E01</td>
</tr>
</tbody>
</table>

Installation Sequence

Perform the installation procedures in the order listed. Performing the procedures in a different order, or skipping a procedure, may result in the TZ875 mini-library malfunctioning or the disabling of the SCSI (small computer system interface) bus.

1. Read the reference documentation to familiarize yourself with the devices and their manuals.
2. Review this installation guide to become familiar with the responsibilities, requirements, and procedures.
3. Complete the procedures described in “Inventorying the Installation Kit.”
4. Complete the procedures described in “How to Install a TZ875 mini-library.”

What You Need

You need the following items to install a TZ875 mini-library into a cabinet:

- A Phillips (cross-head) screwdriver
- The installation kit

Figure 1 Typical TZ875 Installation
Inventoring the Kit

Carefully inventory the contents of the installation kit. Refer to Table 2 to be sure you have all the parts. See Figure 2 to identify the parts.

Table 2  Installation Kit Contents

<table>
<thead>
<tr>
<th>Index No.</th>
<th>Part</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Right-hand Mounting Bracket</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Left-hand Mounting Bracket</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Slide Mounting Bracket</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Slide Mounting Bracket Extension</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>Retainer Clip, Front</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>Retainer Clip, Rear</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>Trim Panel</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>Screw, SEMS, Pan Head, M3 x 6 mm</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>Screw, SEMS, Pan Head, M4 x 10 mm</td>
<td>4</td>
</tr>
<tr>
<td>10</td>
<td>Screw, SEMS, Pan Head, 10-32 x .625 in.</td>
<td>12</td>
</tr>
<tr>
<td>11</td>
<td>U-nut, 10-32</td>
<td>4</td>
</tr>
<tr>
<td>12</td>
<td>Screw, Pan Head, 8-32 x .375 in.</td>
<td>8</td>
</tr>
<tr>
<td>13</td>
<td>Screw, Flat Head, 8-32 x .375 in.</td>
<td>6</td>
</tr>
<tr>
<td>14</td>
<td>Screw, Pan Head, 10-32 x 2 in.</td>
<td>4</td>
</tr>
<tr>
<td>15</td>
<td>Chassis Slide</td>
<td>2</td>
</tr>
</tbody>
</table>

Unpacking the TZ875 Mini-Library

TZ875 mini-libraries are packed in a corrugated carton that may be attached to a wooden shipping pallet as shown in Figure 3. Unpack the TZ875 mini-library as follows:

Note

Before unpacking the equipment, inspect the shipping carton for signs of external damage. Report any damage to the local carrier and to Digital Multivendor Customer Services or your local Digital Sales office.

CAUTION

Failure to thermally stabilize the equipment may damage drive media or associated electronics when the unit is turned on. Environmental stabilization begins when the equipment is placed in the room in which it is to be installed.

1. Cut the shipping straps and remove the corrugated carton from the shipping pallet, if necessary.
2. Open the corrugated carton and remove the tapes, the top shipping brace, and the plastic bag containing the accessories.

3. Remove the TZ875 mini-library from the corrugated carton.

4. Some units are packaged in a plastic bag. If the unit arrives in a plastic bag, leave the bag in place until the unit has adjusted to the local temperature and humidity.

5. Refer to the cabinet Installation and User’s guide for temperature and humidity stabilization procedures.

6. Once the TZ875 mini-library is unpacked, examine its exterior for any apparent damage. Report such problems immediately.

7. Inventory the carton contents against Table 3.

8. Retain the shipping container and all packing materials.

**Figure 3 Unpacking the TZ875 Mini-Library**

**Table 3 Carton Contents**

<table>
<thead>
<tr>
<th>Item</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>TZ875 5–Cartridge Tape Mini–Library</td>
<td>1</td>
</tr>
<tr>
<td>Power Cord</td>
<td>1</td>
</tr>
<tr>
<td>Plastic Key</td>
<td>2</td>
</tr>
<tr>
<td>Terminator</td>
<td>1</td>
</tr>
<tr>
<td>SCSI Cable</td>
<td>1</td>
</tr>
<tr>
<td>SCSI Adapter Cable</td>
<td>1</td>
</tr>
<tr>
<td>Owners Manual</td>
<td>1</td>
</tr>
<tr>
<td>Tape Label Sheet</td>
<td>1</td>
</tr>
<tr>
<td>“Read Me First!” Sheet</td>
<td>1</td>
</tr>
<tr>
<td>Tape Cartridge</td>
<td>5</td>
</tr>
<tr>
<td>Head Cleaning Cartridge</td>
<td>1</td>
</tr>
</tbody>
</table>

How to Install a TZ875 Mini-Library

Installing a TZ875 mini-library in either an SW500 or SW800 cabinet requires that you complete the procedures in the following sequence:

1. Access the cabinet interior.
2. Determine the location.
3. Turn off the power.
4. Disconnect the host.
5. Remove any existing equipment.
6. Install the trim panel.
7. Install the slides.
8. Modify the TZ875.
9. Mount the slide drawer sections.
10. Mount the TZ875 mini-library on slides.
11. Connect the data cables.
12. Connect the power cables.
13. Secure the TZ875 mini-library in the cabinet.
14. Reconnect the host.
15. Turn on the power.
16. Secure the cabinet.

This installation guide does not address the following subjects:
- Integrating the installed TZ875 mini-library into a system
- The SCSI command set
- The SCSI controller
- The host computer system

For detailed information on these subjects, please read the manufacturer’s and system documentation.
Accessing the Cabinet Interior

Use the following procedure to gain access to the interior of the cabinet:

1. If necessary, separate the cabinet from adjacent ones.
2. Unlock and open the cabinet door. If it is necessary to access both CDUs, open both cabinet doors.
   - SW500—Both cabinet doors are held closed by a door lock and a latch. The door lock and latch are located in the middle of the door on the right-hand side. The lock is released by turning it counterclockwise with a key. Pull out on the latch to open the door.
   - SW800—Both cabinet doors are held closed by door locks (Figure 4). The locks are released by turning them counterclockwise with a 5/32-inch hex wrench.
3. Remove the top and side panels. Refer to the SW500 or SW800 Installation and User’s Guide.

WARNING
Cabinet rail edges may be sharp and can slice or abrade skin and cable insulation.

Determining the Location

SW500

The SW500-series cabinets hold up to two TZ875 mini-libraries: one in the front and one in the rear, both at the top. The first TZ875 mini-library is mounted in front; the second one is mounted in the rear. The mounting holes in the cabinet rails are numbered from top to bottom. Mounting holes and positions for the TZ875 mini-libraries are shown in Figure 5. Between a rear mounted TZ875 mini-library and the next lower unit leave one shelf space open for ventilation.

SW800

The SW800-series cabinets hold up to ten TZ875 mini-libraries: the first five in the front and the last five in the rear. The TZ875 mini-libraries are mounted in the cabinet from top to bottom. The mounting holes in the cabinet rails are numbered from top to bottom. Mounting holes and positions for the TZ875 mini-libraries are shown in Figure 6.

Turning Off the Power

Use the following procedure to turn off power in the cabinet:

WARNING
While working in the cabinet interior, ac power must be removed from the cabinet components. Failure to do so may result in personal injury as a result of electric shock.

1. Prior to performing any of the installation procedures, remove ac power from the cabinet components.
2. If the cabinet is operating, spin down all disk drives and halt all tape drives in the cabinet.
3. Switch the circuit breaker on the front panel of the cabinet’s CDU/CDUs to the O (OFF) position.
4. Disconnect the cabinet from facility power.

Disconnecting the Host

Disconnect the host from the cabinet. Refer to the documentation for the system and the host.

Removing Existing Equipment

Remove and/or reposition any equipment that may be occupying the cabinet position where you want to install the TZ875 mini-library. Refer to the equipment and cabinet documentation.
Figure 5  SW500 Mounting Locations

Figure 6  SW800 Mounting Locations
Removing the Grille Panel

Removing the SW500 Grille Panel

Use the following procedure to remove the grille panel from an SW500 cabinet:

1. Remove the SW500 grille panel by pressing it out of the door from the rear. Support the grille panel so it does not fall.
2. After removing the grille panel, install the trim panel as described below.

Removing the SW800 Grille Panel

Use the following procedure to remove the grille panel from an SW800 cabinet:

1. Insert the four removal screws into the threaded inserts located in the cabinet door (Figure 7).
2. Remove the grille panel from the cabinet door by partially tightening each removal screw in sequence until the grille panel pops loose. Support the grille panel so it does not fall.
3. Remove the removal screws.
4. After removing the grille panel, install the trim panel as described below.

Installing the Slides

Install the Slide-Mounting Brackets for Front Mounting

Use the following procedure to install the slide-mounting brackets for front mounting a TZ875 mini-library (see Figure 9):

1. Locate the first mounting hole of the desired mounting position. See Figure 5 (SW500) or Figure 6 (SW800).
2. At the inner flange, install a U-nut at the center mounting hole of the mounting position. For example, hole 2 for position 1.
3. Secure the front of the mounting bracket to the outer flange at the mounting position’s first and third mounting holes. Do not tighten the screws.
4. Secure the mounting bracket to the U-nut on the inner flange.
5. Make sure the mounting brackets are aligned vertically and tighten all mounting screws.
6. Repeat steps 1 through 5 for the opposite side.

Installing the Trim Panel

Mount the trim panel on the cabinet door (Figure 8) by pressing the mounting studs on the trim panel into the mounting holes in the cabinet door. The thin, horizontal member of the trim panel goes at the bottom.

Figure 8 Mounting the Trim Panel

Figure 7 Removing the SW800 Grille Panel

Figure 5 Mounting the Trim Panel
Mounting the Slides

Install the Slide-Mounting Brackets for Rear Mounting

Use the following procedure to install the slide-mounting brackets for rear mounting a TZ875 mini-library (see Figure 10):

1. Locate the first mounting hole for the desired mounting position. See Figure 5 (SW500) or Figure 6 (SW800).
2. At the inner flange, install a U-nut at the center mounting hole of the mounting position. For example, hole 2 for position 1.
3. Secure the mounting-bracket extension to the outer flange at the mounting position’s first and third mounting holes.
4. Secure the front of the mounting bracket to the front of the mounting-bracket extension. Do not tighten screws.
5. Secure the mounting bracket to the U-nut on the inner flange.
6. Make sure the mounting brackets are aligned vertically and tighten all mounting screws.
7. Repeat steps 1 through 6 for the opposite side.

Mounting the Slides

Use the following procedure to mount the slides to the slide-mounting brackets (see Figure 11):

1. Extend the slide until all four mounting holes are exposed.
2. Align the mounting holes on the slide with the mounting holes on the mounting bracket and attach one to the other with four screws.
Modifying the TZ875 Mini-Library

Use the following procedure to modify the TZ875 mini-library:

1. Install the mounting brackets on the TZ875 mini-library as shown in Figure 12.
2. Install the appropriate retainer clips on the TZ875 mini-library as shown in Figure 12.

Figure 12  Modifying the TZ875 Mini-Library
Mounting the Slide Drawer Sections

1. Fully extend the slides.

2. Remove the slide drawer sections from the slides by pressing the slide locks and pulling the slide drawer sections from the slides as shown in Figure 13.

3. Mount the slide drawer sections to the mounting brackets on the TZ875 mini-library as shown in Figure 14.

Figure 13  Removing the Slide Drawer Sections

Figure 14  Mounting the Slide Drawer Sections
Mounting the TZ875 Mini-Library

Mount the TZ875 on the slides in the cabinet as described in the following procedure and shown in Figure 15:

1. Fully extend the slides until they lock.
2. Insert the slide drawer sections on the TZ875 mini-library into the intermediate sections of the slides and push in until the slide locks are engaged.
3. Press in on the slide locks to disengage them and push the TZ875 mini-library fully into the cabinet.

Figure 15 Mounting the TZ875 Mini-Library
Connecting the Data Cables

Use the following procedure to connect the data cables to the TZ875 mini-library:

Note

Refer to the cabinet Installation and User’s Guide for SCSI–2 cable routing information and general signal cable routing rules. Also, refer to the Configuration Guide for additional SCSI–2 cable information.

1. Use an adapter cable to connect the controller data cable to each TZ875 mini-library that connects directly to a controller (Figure 16).

2. Chain TZ875 mini-libraries by cabling a connector on one TZ875 mini-library to a connector on another TZ875 mini-library. A maximum of two TZ875 mini-libraries may be chained together.

3. Install a terminator on the empty connector of the last TZ875 mini-library in the chain. If there is only one TZ875 mini-library installed, it is the last TZ875 mini-library.

Figure 16 Connecting the Data Cables

Connecting the Power Cord

Use the following procedure to connect the power cord to the TZ875 mini-library:

1. Determine which preinstalled power cord is not being used and unplug it from the CDU, or use an empty CDU power receptacle.

2. Plug the power cord supplied with the TZ875 mini-library into the CDU.

3. Route the power cord to the TZ875 mini-library. Refer to the cabinet Installation and User’s Guide for routing information.

4. Connect the power cord to the TZ875 mini-library.

5. Set the TZ875 mini-library power switch to | (ON).

Securing the TZ875 Mini-Library

Use the following procedure to secure the TZ875 mini-library in the cabinet:

1. Loosen the shipping screw under the TZ875 mini-library (right side from front). Refer to the TZ875 mini-library Owner’s Manual.

2. Install U-nuts in the appropriate holes of the cabinet flanges (Figure 17).

3. Slide the TZ875 mini-library all the way into the cabinet.

4. Secure the TZ875 mini-library to the cabinet by fastening the retainer clips to the cabinet rails with screws.

Figure 17 Securing the TZ875 Mini-Library
Reconnecting the Host

Reconnect the host to the cabinet. Refer to the documentation for the host and the system.

Turning On the Power

Use the following procedure to turn on power to the cabinet:

1. Verify that the shipping screw under the TZ875 mini-library (right side from front) was loosened before you turn on power. Refer to the TZ875 mini-library Owner’s Manual.
2. Turn on ac power to the cabinet components.
3. Turn on system power.
4. Switch the circuit breaker on the front panel of the cabinet’s CDU/CDUs to the | (ON) position.

Securing the Cabinet

1. Install the side and top panels on the cabinet. Refer to the SW500 and SW800 Installation and User’s Guides.
2. Close and lock the cabinet door.

Setting SCSI Address

A SCSI address must be assigned to each TZ875 mini-library installed in a cabinet and connected to the SCSI bus. Refer to the TZ875 mini-library Owner’s Manual for the procedure to set a TZ875 mini-library SCSI address.