SEPTEMBER 2000
CD100A
CD107A-R4
CD227A-R4
CD257A-R5
CD327A-R4
CD357A-R4
CD090

OMNI Tower with CD-ROM Drives
OMNI Tower without Drives
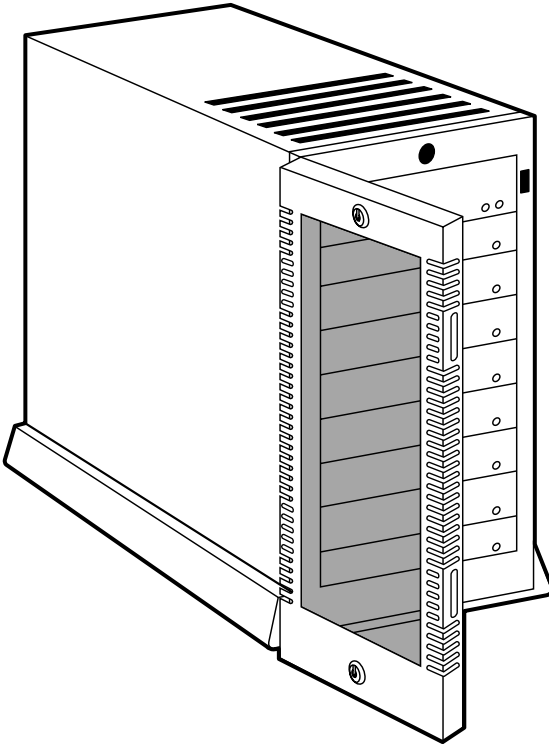
FEDERAL COMMUNICATIONS COMMISSION
and CANADIAN DEPARTMENT OF COMMUNICATIONS
RADIO FREQUENCY INTERFERENCE STATEMENT

Class B Digital Device. This equipment has been tested and found to comply with the limits for a Class B computing device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. However, there is no guarantee that interference will not occur in a particular 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. If this equipment does cause harmful interference to radio or telephone reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one 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 an experienced radio/TV technician for help.

Caution:
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

To meet FCC requirements, shielded cables and power cords are required to connect this device to a personal computer or other Class B certified device.

This digital apparatus does not exceed the Class B limits for radio noise emission from digital apparatus set out in the Radio Interference Regulation of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de classe B prescrites dans le Règlement sur le brouillage radioélectrique publié par le ministère des Communications du Canada.

NORMAS OFICIALES MEXICANAS (NOM)
ELECTRICAL SAFETY STATEMENT

INSTRUCCIONES DE SEGURIDAD

1. Todas las instrucciones de seguridad y operación deberán ser leídas antes de que el aparato eléctrico sea operado.

2. Las instrucciones de seguridad y operación deberán ser guardadas para referencia futura.

3. Todas las advertencias en el aparato eléctrico y en sus instrucciones de operación deben ser respetadas.

4. Todas las instrucciones de operación y uso deben ser seguidas.

5. El aparato eléctrico no deberá ser usado cerca del agua—por ejemplo, cerca de la tina de baño, lavabo, sótano mojado o cerca de una alberca, etc..

6. El aparato eléctrico debe ser usado únicamente con carritos o pedestales que sean recomendados por el fabricante.

7. El parato eléctrico debe ser montado a la pared o al techo sólo como sea recomendado por el fabricante.

8. Servicio—El usuario no debe intentar dar servicio al equipo eléctrico más allá a lo descrito en las instrucciones de operación. Todo otro servicio deberá ser referido a personal de servicio calificado.

9. El aparato eléctrico debe ser situado de tal manera que su posición no interfiera su uso. La colocación del aparato eléctrico sobre una cama, sofá, alfombra o superficie similar puede bloquea la ventilación, no se debe colocar en libreros o gabinetes que impidan el flujo de aire por los orificios de ventilación.

10. El equipo eléctrico deber ser situado fuera del alcance de fuentes de calor como radiadores, registros de calor, estufas u otros aparatos (incluyendo amplificadores) que producen calor.

11. El aparato eléctrico deberá ser connectado a una fuente de poder sólo del tipo descrito en el instructivo de operación, o como se indique en el aparato.

12. Precaución debe ser tomada de tal manera que la tierra fisica y la polarización del equipo no sea eliminada.

13. Los cables de la fuente de poder deben ser guiados de tal manera que no sean pisados ni pellizcados por objetos colocados sobre o contra ellos, poniendo particular atención a los contactos y receptáculos donde salen del aparato.

14. El equipo eléctrico debe ser limpiado únicamente de acuerdo a las recomendaciones del fabricante.

15. En caso de existir, una antena externa deberá ser localizada lejos de las lineas de energia.

16. El cable de corriente deberá ser desconectado del cuando el equipo no sea usado por un largo periodo de tiempo.

17. Cuidado debe ser tomado de tal manera que objectos liquidos no sean derramados sobre la cubierta u orificios de ventilación.

18. Servicio por personal calificado deberá ser provisto cuando:

    A: El cable de poder o el contacto ha sido dañado; u

    B: Objectos han caído o líquido ha sido derramado dentro del aparato; o

    C: El aparato ha sido expuesto a la lluvia; o

    D: El aparato parece no operar normalmente o muestra un cambio en su desempeño; o

    E: El aparato ha sido tirado o su cubierta ha sido dañada.

OMNI TOWER

TRADEMARKS

The trademarks mentioned in this manual are the sole property of their owners.

CONTENTS

1. Specifications

Drive Speed—40X

Power Input—Voltage (auto-ranging): 90-132/180-250 VAC; Input Current: 7.3/4.0 amps; AC input frequency: 47-63 Hz; 300 watts total maximum continuous

Cooling—42.5 cfm rear wall fan; 35 cfm power supply fan

Power consumption—P=V x I (Power [watts]=Voltage x Current)

Size—20"H x 10.25"W x 22"D (50.8 x 26.1 x 55.9 cm)

Weight—69 lb. (31.4 kg), fully configured with connectivity bays and drive cells

2. Introduction

2.1 Description

The Omni Tower is the modular solution to consolidating your CD-ROM drives. Organize your data better than ever before with a single Omni Tower with 7 CD-ROM Drives, or connect up to 28 towers to create any configuration from 7 to 196 drives. Your system grows as you need more disk space. Plus, the Tower's rackmountable in a standard 19" frame. With the Tower, there's no single point of failure—all system components are interchangeable and hot-swappable, so you don't have to power down the system to change drives. An optional backup power supply is also available to protect your system in case the first power supply fails.

If you already have CD-ROM drives, the OMNI Tower without Drives is your ideal solution to consolidating them into one easily manageable unit. The 40X drives for the CD100A unit is our 40X CD-ROM Drive (part number CDROMHS-R2).

2.2 Available Models

Five models of Towers with CD-ROMs are available; one model of the Tower without drives is available. These models include:

- OMNI Tower with 7 CD-ROM Drives for SCSI (part number CD107A-R4)

- OMNI Tower with 7 CD-ROM Drives for Ethernet/Novell (part number CD227A-R4)

- OMNI Tower with 7 CD-ROM Drives for Ethernet/Windows NT (part number CD257A-R5)

- OMNI Tower with 7 CD-ROM Drives for Token Ring/Novell (part number CD327A-R4)

- OMNI Tower with 7 CD-ROM Drives for Token Ring/Windows NT (part number CD357A-R4)

- OMNI Tower without Drives (part number CD100A)

Also available are a redundant power supply and a 12X CD-ROM Drive.

• Hot-Swappable 300W Power Supply (Redundant) (part number CD090)

• 40X CD-ROM Drive (part number CDROMHS-R2)

2.3 What the Package Includes

Your package should include the following items. If anything is missing or damaged, please contact Black Box immediately at 724-746-5500.

• Omni Tower with 7 CD-ROM Drives or OMNI Tower without Drives

• This User Manual

2.4 Precautions

2.4.1 ENVIRONMENT

Avoid placing the Omni Tower in a location that's subject to:

• High humidity

• Excessive dust

• Mechanical vibration

• Direct sunlight

Do not move the Tower during operation, or it might malfunction while reading data.

Don't expose the Tower to sudden changes in temperature, since condensation may form on the lens inside the drive. If the surrounding temperature suddenly rises while the drive is on, wait at least one hour before turning off the power. Operating a Tower immediately after a sudden increase in temperature may cause a malfunction during reading.

2.4.2 TRANSPORTATION

Keep the original packing materials in case you need to ship or store the Tower.

2.4.3 CAUTION

The laser beam in each Tower drive unit is harmful to the eyes. DO NOT ATTEMPT TO DISASSEMBLE THE CABINET. Only qualified service personnel should service the unit. Using optical instruments with this product will increase the eye hazard.

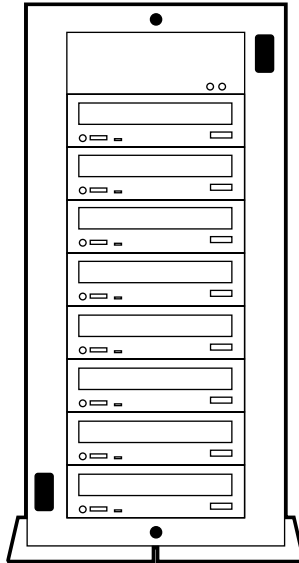# 3. Location and Function of Parts and Controls

3.1 Front

The door is on the front of the Tower, and can be adjusted to open from either side. To adjust the door, unsnap the door and bezel from the frame, rotate the door 180 degrees, and reattach (snap) it to the frame (see **Figures 3-1** and **3-2**).
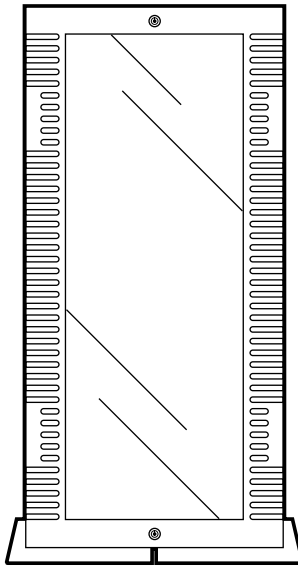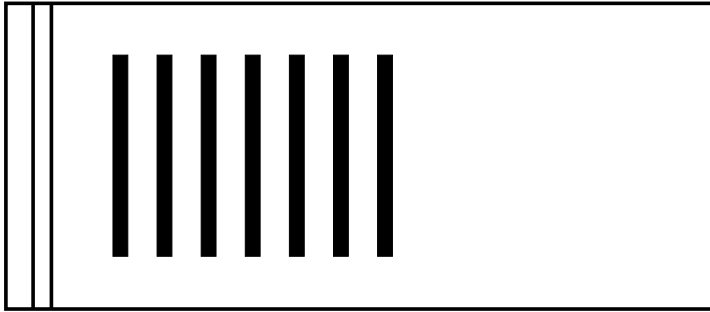
FRONT VIEW

Figure 3-1. Front Door.

3.2 Bezel

FRONT VIEW

Figure 3-2. Bezel.

3.3 Top

The top of the Tower provides slots for either seven CD-ROM jewel boxes or an optional personality connectivity module for Ethernet or Token Ring. You can remove the top by pulling up on it. See **Figure 3-3**.
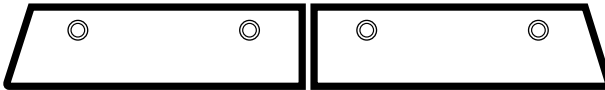
TOP VIEW

Figure 3-3. Top.

3.4 Base

The base of the Tower is actually two identical pieces held in place by four screws at the front and three screws and bolts between the halves (see **Figure 3-4**). Once you remove the screws, you can unsnap the base from the frame.

The base comes equipped with four adjustable feet that can be replaced with optional rolling casters.
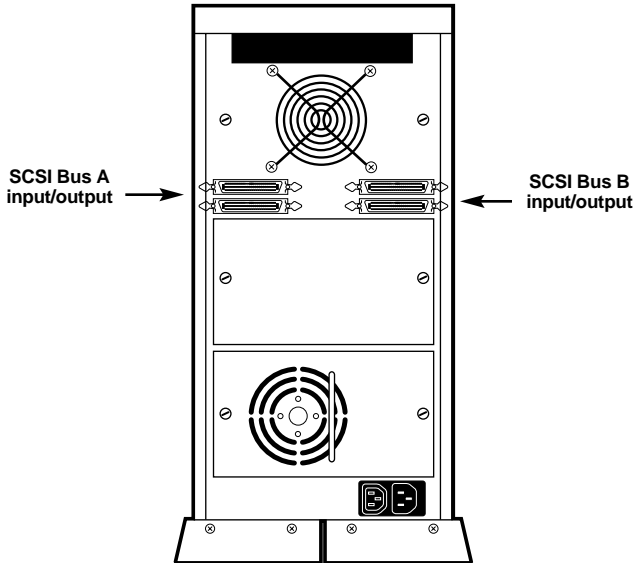
FRONT VIEW

Figure 3-4. Base.

3.5 Back

Figure 3-5. Back.

The back of the Tower contains the following parts (see Figure 3-5):

1. Connectivity module port.

2. Fans.

3. SCSI I/O ports.

4. Redundant power supply bay.

5. Power supply and power supply fan.

6. AC Out/AC In and fuse box.
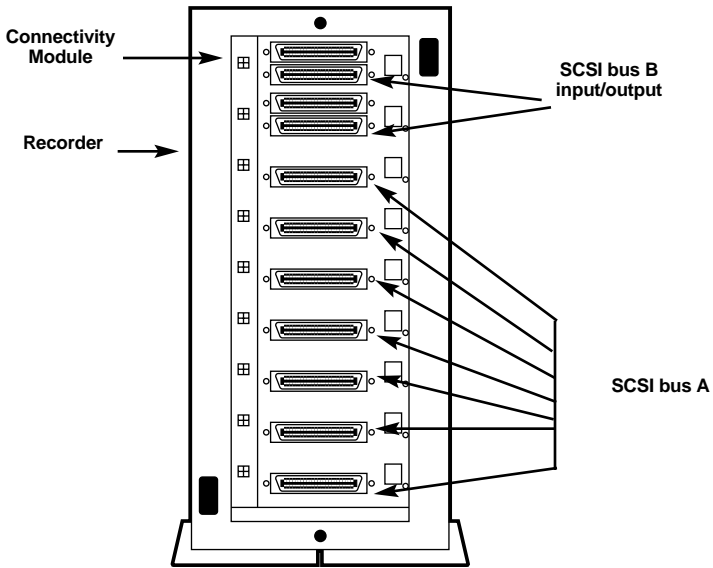
7. Identification label.

Figure 3-6. Front.

3.6 SCSI ID Settings

There are eight SCSI addresses (0–7) for any device on a SCSI bus. The host adapter is always address 7. The PC's bootable hard drive, C:, may be SCSI address 0, and other SCSI devices attached to the host adapter must each have a unique SCSI address between 1 and 6. A OMNI Tower, which includes 7 SCSI drives, must be attached to a dedicated SCSI host adapter. Located on the back of each drive cell tray are SCSI push button address switches for assigning SCSI addresses.

Set the SCSI addresses by pushing the small button below the switch address indicator until the desired address appears in the window. The upper button reverses the selection.

NOTE
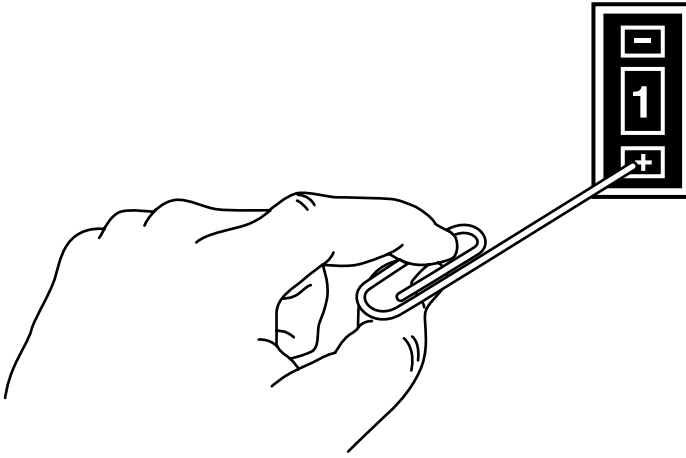**SCSI IDs come preset on the drive cell trays in the chassis.**

Figure 3-6. Setting the SCSI Addresses.

3.7 Twin and Rack Configuration

3.7.1 TWIN

The Tower can be re-assembled as a twin tower. See **Figure 3-7** on the next page, and follow these steps:

   1. Remove the base.

   2. Separate the two halves.

   3. Rotate the two sections 90 degrees.

   4. Snap the two sections onto the two sections of the base.

    A third mounting hole underneath each separate base is provided for extra support for the twin tower using the unused bases adjustable feet or optional casters.
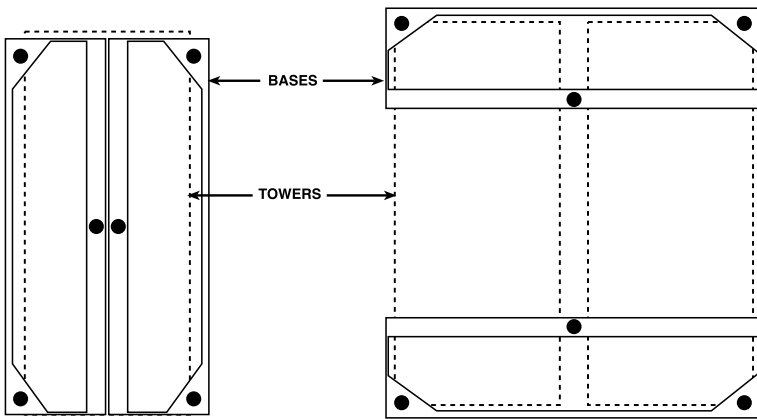
BOTTOM VIEW

Figure 3-7. Re-assembling the Unit as a Twin Tower.

3.7.2 RACK

The Tower can also be rack-mounted. Follow these steps:

1. Remove the top and base from the Tower chassis.

2. Unsnap the door and the bezel to expose the rack-mounting brackets.

3. Mount the Tower in the rack.

4. Reattach the door and bezel.

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