

M6-700, M6-705, M6-715, M7-700,
M7-705 or M7-715
Managing devices

ESCALA Power7



REFERENCE
86 A1 76FG04

ESCALA Models Reference

The ESCALA Power7 publications concern the following models:

Bull Escala E1-700 / E3-700	(31E/2B ,8231-E2B)
Bull Escala E1-705	(31E/1C, 8231-E1C)
Bull Escala E1-715	(31E/1D, 8231-E1D)
Bull Escala E3-705	(31E/2C, 8231-E2C)
Bull Escala E3-715	(31E/2D, 8231-E2D)
Bull Escala E2-700 / E2-700T	(02E/4B, 8202-E4B)
Bull Escala E2-705 / E2-705T	(02E/4C, 8202-E4C)
Bull Escala E2-715 / E2-715T	(02E/4D, 8202-E4D)
Bull Escala E4-700 / E4-700T	(05F/6B, 8205-E6B)
Bull Escala E4-705	(05E/6C, 8205-E6C)
Bull Escala E4-715	(05E/6D, 8205-E6D)
Bull Escala E5-700	(33E/8B, 8233-E8B)
Bull Escala E5-715	(08E/8D, 8408-E8D)
Bull Escala M5-715	(09R/MD, 9109-RMD)
Bull Escala M6-700	(17M/MB, 9117-MMB)
Bull Escala M6-705	(17M/MC, 9117-MMC)
Bull Escala M6-715	(17M/MD, 9117-MMD)
Bull Escala M7-700	(79M/HB, 9179-MHB)
Bull Escala M7-705	(79M/HC, 9179-MHC)
Bull Escala M7-715	(79M/HD, 9179-MHD)
Bull Escala H9-700	(19F/HB, 9119-FHB)

References to 8236-E8C models are irrelevant.

Hardware

February 2013

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Contents

Safety notices	v
Managing devices	1
Managing DVD drives	3
SATA Slimline DVD-RAM Drive (FC 5762)	3
SATA Slimline DVD-RAM Drive (FC 5771)	3
Handling and storing the DVD media	4
Opening a DVD tray manually	4
DVD-RAM type II disc	5
Managing diskette drives	7
External USB 1.44 MB diskette drive (FC 2591)	7
Managing removable disk drives	9
RDX USB External Dock (1104 and EU04) and RDX Removable Disk Drives (1106, 1107, EU01, EU08, and EU15)	9
Notices	15
Trademarks	16
Electronic emission notices	16
Class A Notices	16
Class B Notices	20
Terms and conditions	22

Safety notices

Safety notices may be printed throughout this guide.

- **DANGER** notices call attention to a situation that is potentially lethal or extremely hazardous to people.
- **CAUTION** notices call attention to a situation that is potentially hazardous to people because of some existing condition.
- **Attention** notices call attention to the possibility of damage to a program, device, system, or data.

World Trade safety information

Several countries require the safety information contained in product publications to be presented in their national languages. If this requirement applies to your country, a safety information booklet is included in the publications package shipped with the product. The booklet contains the safety information in your national language with references to the U.S. English source. Before using a U.S. English publication to install, operate, or service this product, you must first become familiar with the related safety information in the booklet. You should also refer to the booklet any time you do not clearly understand any safety information in the U.S. English publications.

Laser safety information

The servers can use I/O cards or features that are fiber-optic based and that utilize lasers or LEDs.

Laser compliance

The servers may be installed inside or outside of an IT equipment rack.

DANGER

When working on or around the system, observe the following precautions:

Electrical voltage and current from power, telephone, and communication cables are hazardous. To avoid a shock hazard:

- Connect power to this unit only with the provided power cord. Do not use the provided power cord for any other product.
- Do not open or service any power supply assembly.
- Do not connect or disconnect any cables or perform installation, maintenance, or reconfiguration of this product during an electrical storm.
- The product might be equipped with multiple power cords. To remove all hazardous voltages, disconnect all power cords.
- Connect all power cords to a properly wired and grounded electrical outlet. Ensure that the outlet supplies proper voltage and phase rotation according to the system rating plate.
- Connect any equipment that will be attached to this product to properly wired outlets.
- When possible, use one hand only to connect or disconnect signal cables.
- Never turn on any equipment when there is evidence of fire, water, or structural damage.
- Disconnect the attached power cords, telecommunications systems, networks, and modems before you open the device covers, unless instructed otherwise in the installation and configuration procedures.
- Connect and disconnect cables as described in the following procedures when installing, moving, or opening covers on this product or attached devices.

To Disconnect:

1. Turn off everything (unless instructed otherwise).
2. Remove the power cords from the outlets.
3. Remove the signal cables from the connectors.
4. Remove all cables from the devices.

To Connect:

1. Turn off everything (unless instructed otherwise).
2. Attach all cables to the devices.
3. Attach the signal cables to the connectors.
4. Attach the power cords to the outlets.
5. Turn on the devices.

(D005a)

DANGER

Observe the following precautions when working on or around your IT rack system:

- Heavy equipment—personal injury or equipment damage might result if mishandled.
- Always lower the leveling pads on the rack cabinet.
- Always install stabilizer brackets on the rack cabinet.
- To avoid hazardous conditions due to uneven mechanical loading, always install the heaviest devices in the bottom of the rack cabinet. Always install servers and optional devices starting from the bottom of the rack cabinet.
- Rack-mounted devices are not to be used as shelves or work spaces. Do not place objects on top of rack-mounted devices.



- Each rack cabinet might have more than one power cord. Be sure to disconnect all power cords in the rack cabinet when directed to disconnect power during servicing.
- Connect all devices installed in a rack cabinet to power devices installed in the same rack cabinet. Do not plug a power cord from a device installed in one rack cabinet into a power device installed in a different rack cabinet.
- An electrical outlet that is not correctly wired could place hazardous voltage on the metal parts of the system or the devices that attach to the system. It is the responsibility of the customer to ensure that the outlet is correctly wired and grounded to prevent an electrical shock.

CAUTION

- Do not install a unit in a rack where the internal rack ambient temperatures will exceed the manufacturer's recommended ambient temperature for all your rack-mounted devices.
- Do not install a unit in a rack where the air flow is compromised. Ensure that air flow is not blocked or reduced on any side, front, or back of a unit used for air flow through the unit.
- Consideration should be given to the connection of the equipment to the supply circuit so that overloading of the circuits does not compromise the supply wiring or overcurrent protection. To provide the correct power connection to a rack, refer to the rating labels located on the equipment in the rack to determine the total power requirement of the supply circuit.
- *(For sliding drawers.)* Do not pull out or install any drawer or feature if the rack stabilizer brackets are not attached to the rack. Do not pull out more than one drawer at a time. The rack might become unstable if you pull out more than one drawer at a time.
- *(For fixed drawers.)* This drawer is a fixed drawer and must not be moved for servicing unless specified by the manufacturer. Attempting to move the drawer partially or completely out of the rack might cause the rack to become unstable or cause the drawer to fall out of the rack.

(R001)

CAUTION:

Removing components from the upper positions in the rack cabinet improves rack stability during relocation. Follow these general guidelines whenever you relocate a populated rack cabinet within a room or building:

- Reduce the weight of the rack cabinet by removing equipment starting at the top of the rack cabinet. When possible, restore the rack cabinet to the configuration of the rack cabinet as you received it. If this configuration is not known, you must observe the following precautions:
 - Remove all devices in the 32U position and above.
 - Ensure that the heaviest devices are installed in the bottom of the rack cabinet.
 - Ensure that there are no empty U-levels between devices installed in the rack cabinet below the 32U level.
- If the rack cabinet you are relocating is part of a suite of rack cabinets, detach the rack cabinet from the suite.
- Inspect the route that you plan to take to eliminate potential hazards.
- Verify that the route that you choose can support the weight of the loaded rack cabinet. Refer to the documentation that comes with your rack cabinet for the weight of a loaded rack cabinet.
- Verify that all door openings are at least 760 x 230 mm (30 x 80 in.).
- Ensure that all devices, shelves, drawers, doors, and cables are secure.
- Ensure that the four leveling pads are raised to their highest position.
- Ensure that there is no stabilizer bracket installed on the rack cabinet during movement.
- Do not use a ramp inclined at more than 10 degrees.
- When the rack cabinet is in the new location, complete the following steps:
 - Lower the four leveling pads.
 - Install stabilizer brackets on the rack cabinet.
 - If you removed any devices from the rack cabinet, repopulate the rack cabinet from the lowest position to the highest position.
- If a long-distance relocation is required, restore the rack cabinet to the configuration of the rack cabinet as you received it. Pack the rack cabinet in the original packaging material, or equivalent. Also lower the leveling pads to raise the casters off of the pallet and bolt the rack cabinet to the pallet.

(R002)

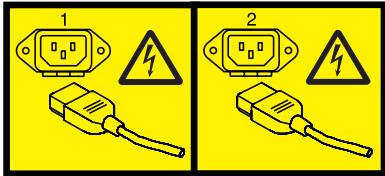
(L001)



(L002)



(L003)



or



All lasers are certified in the U.S. to conform to the requirements of DHHS 21 CFR Subchapter J for class 1 laser products. Outside the U.S., they are certified to be in compliance with IEC 60825 as a class 1 laser product. Consult the label on each part for laser certification numbers and approval information.

CAUTION:

This product might contain one or more of the following devices: CD-ROM drive, DVD-ROM drive, DVD-RAM drive, or laser module, which are Class 1 laser products. Note the following information:

- Do not remove the covers. Removing the covers of the laser product could result in exposure to hazardous laser radiation. There are no serviceable parts inside the device.
- Use of the controls or adjustments or performance of procedures other than those specified herein might result in hazardous radiation exposure.

(C026)

CAUTION:

Data processing environments can contain equipment transmitting on system links with laser modules that operate at greater than Class 1 power levels. For this reason, never look into the end of an optical fiber cable or open receptacle. (C027)

CAUTION:

This product contains a Class 1M laser. Do not view directly with optical instruments. (C028)

CAUTION:

Some laser products contain an embedded Class 3A or Class 3B laser diode. Note the following information: laser radiation when open. Do not stare into the beam, do not view directly with optical instruments, and avoid direct exposure to the beam. (C030)

CAUTION:

The battery contains lithium. To avoid possible explosion, do not burn or charge the battery.

Do Not:

- ___ Throw or immerse into water
- ___ Heat to more than 100°C (212°F)
- ___ Repair or disassemble

Exchange only with the approved part. Recycle or discard the battery as instructed by local regulations. (C003a)

Power and cabling information for NEBS (Network Equipment-Building System) GR-1089-CORE

The following comments apply to the servers that have been designated as conforming to NEBS (Network Equipment-Building System) GR-1089-CORE:

The equipment is suitable for installation in the following:

- Network telecommunications facilities
- Locations where the NEC (National Electrical Code) applies

The intrabuilding ports of this equipment are suitable for connection to intrabuilding or unexposed wiring or cabling only. The intrabuilding ports of this equipment *must not* be metallically connected to the interfaces that connect to the OSP (outside plant) or its wiring. These interfaces are designed for use as intrabuilding interfaces only (Type 2 or Type 4 ports as described in GR-1089-CORE) and require isolation from the exposed OSP cabling. The addition of primary protectors is not sufficient protection to connect these interfaces metallically to OSP wiring.

Note: All Ethernet cables must be shielded and grounded at both ends.

The ac-powered system does not require the use of an external surge protection device (SPD).

The dc-powered system employs an isolated DC return (DC-I) design. The DC battery return terminal *shall not* be connected to the chassis or frame ground.

Managing devices

Learn about managing media and communications devices.

The topic collection contains reference information that information technology (IT) personnel and service representatives can use to learn about using and managing removable media devices and communications devices. You can also find specifications and installation notes for specific devices.

The following listed features are electromagnetic compatibility (EMC) Class B features. See the EMC Class B Notices in the Hardware Notices section.

- 80/160 GB Internal Tape Drive VXA-2 (FC 6120)
- 160/320 GB Internal Tape Drive VXA-320 (FC 6279)
- 60/150 GB 16-bit 8-mm Internal Tape Drive (FC 6134)
- 36/72 GB Data72 4 mm Internal Tape Drive (FC 6258 or 5907)
- 80/160 GB DAT160 SAS Tape Drive (FC 5619)
- 160/320 GB DAT320 SAS Tape Drive (FC 5661)
- IDE Slimline DVD-ROM Drive (FC 5756)
- IDE Slimline DVD-RAM Drive (FC 5757)
- SATA Slimline DVD-ROM Drive (FC 5743)
- SATA Slimline DVD-RAM Drive (FC 5762)
- External USB 1.44 MB Diskette Drive (FC 2591)
- 160/320 GB DAT320 USB Tape Drive (FC 5673)
- 80/160 GB DAT160 SAS Tape Drive (FC 1124)
- RDX USB External Dock (EU04)
- RDX Removable Disk Drives (1106, 1107, EU01, and EU08)

Managing DVD drives

Learn about using and managing removable media devices. Find specifications and installation notes for specific drives.

SATA Slimline DVD-RAM Drive (FC 5762)

Learn about the specifications of this DVD-RAM drive.

The serial advanced technology attachment (SATA) Slimline DVD-RAM Drive is an internal, low profile DVD-RAM drive that is capable of reading and writing 4.7 GB DVD-RAM discs, as well as reading a multitude of other optical media discs. This drive reads type II (removable from cartridge) DVD-RAM discs. The drive also reads CD-ROM, CD-R, CD-RW, DVD-R, DVD+R, DVD-RW, and DVD+RW. System boot and installation functions are supported with CD and DVD media.

Specifications

- FRU part number: 44V4220
- Custom card identification number (CCIN): 6331 model 004

Note: The model field is subject to change.

- Media:
 - Reads CD-ROM, CD-R, CD-RW, DVD-ROM, DVD-RAM, DVD-R, DVD+R, DVD-RW, and DVD+RW discs
 - Writes 4.7 GB DVD-RAM discs
- Interface: SATA
- Connector: Slimline SATA
- Connector: SATA
- Loading tray: supports 12 cm and 8 cm discs
- Operating positions: vertical or horizontal (8 cm discs require horizontal operation)
- Form factor: 12.7 mm Slimline
- DVD video: not supported
- AIX® 5.1 only reads CD-type formatted DVD media
- Requirements: 1 Slimline media bay

SATA Slimline DVD-RAM Drive (FC 5771)

Learn about the specifications of this DVD-RAM drive.

The serial advanced technology attachment (SATA) Slimline DVD-RAM Drive is an internal, low profile DVD-RAM drive that is capable of reading and writing 4.7 GB DVD-RAM discs, as well as reading a multitude of other optical media discs. This drive also reads type II (removable from cartridge) DVD-RAM discs. System boot and installation functions are supported with CD-ROM and DVD-RAM media.

Specifications

- FRU part number: 74Y7341
- Custom card identification number (CCIN): 6331 model 004
- Media:

- Reads CD-ROM, CD-R, CD-RW, DVD-ROM, and DVD-RAM discs
- Writes 4.7 GB DVD-RAM discs
- Interface: SATA
- Connector: Slimline SATA
- Connector: SATA
- Loading tray: supports 12 cm and 8 cm discs
- Operating positions: vertical or horizontal (8 cm discs require horizontal operation)
- Form factor: 12.7 mm Slimline
- DVD video: not supported
- AIX 5.1 only reads CD-type formatted DVD media
- Requirements: 1 Slimline media bay

Handling and storing the DVD media

Learn how to handle and store the DVD media.

DVD media must be handled with care. Leaving the media exposed allows dirt particles to accumulate and to become a source of contamination. Handling the DVD media with care reduces errors and improves the performance.

Restrictions on using DVD media

Correct ways to handle DVD media:

1. Handle media by the outer edge or the center hole.
2. Store media in jewel cases specified for DVDs.
3. Return media to storage cases immediately after use to minimize the effects of environmental changes.
4. Store media in a cool, dry environment in which the air is clean.
5. Remove dirt, foreign materials, fingerprints, smudges, and liquids by wiping with a clean cotton fabric in a straight line from the center of the disc toward the outer edge.
6. Check the media surface before recording.

Incorrect ways to handle DVD media:

1. Touch the surface of the media.
2. Bend the media.
3. Use adhesive labels on the media.
4. Expose media to extreme heat or high humidity.
5. Expose media to prolonged sunlight or other sources of ultraviolet light.
6. Write or mark in the data area of the media.
7. Clean by wiping in a circular direction going around the disc.

Opening a DVD tray manually

Under usual conditions, the tray automatically opens when you press the Load/Unload button. If it does not automatically open, you can use the emergency eject feature to open the tray manually.

Follow these steps to manually open the tray:

1. Follow your operating system instructions for shutting down your system, then turn off the power to your system unit. Unplug the power cord from the wall outlet.
2. Insert the straightened end of a paper clip into the emergency eject hole until you feel some resistance.

3. Continue to push in the paper clip while you pull out the tray with your fingernail.
4. Pull the tray completely open and remove the disc. It is usual for the tray to make a clicking sound while you are pulling it open.

DVD-RAM type II disc

The DVD-RAM type II disc can be removed from its cartridge and played in a DVD-ROM or DVD-RAM drive that is compatible with the DVD-RAM type II disc.

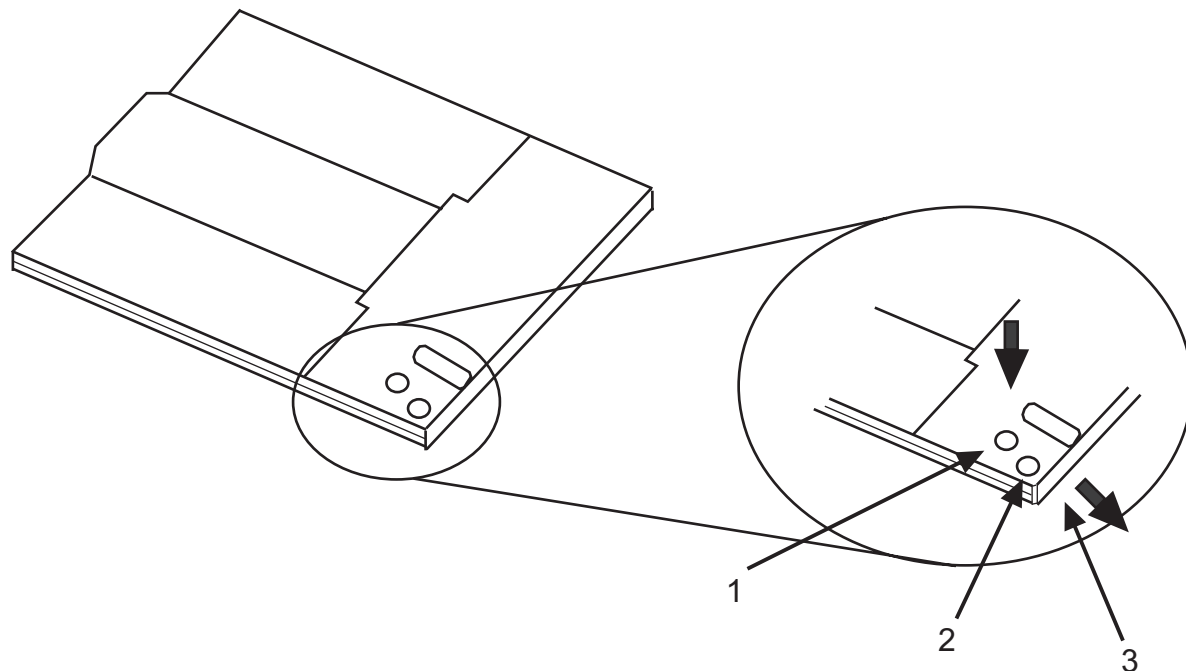
Attention: Be careful when handling removed discs. Debris, dust particles, fingerprints, smears, or scratches can affect recording and playback of discs. Do not use solvents to clean disc surfaces. To clean a disc, use a soft, lint free cloth and gently wipe the disc surface outwards from the center hole to the outer edge. Do not rub, make circular motions or try to follow the circular lines in the disc. When labeling a disc, write only on the printed label side, using a soft felt-tip marker. Do not use a hard-tip pen to write on disc surface. Keep out of direct sunlight, high temperatures, and humidity. Do not attach labels to either side of the disc.

Removing a disc from the cartridge

To remove a disc from the cartridge, do the following steps:

Note: Handle the disc only by its edges.

1. Use the tip of a ballpoint pen to push the locking pin up and out of the disc cartridge.
2. Use the tip of a ballpoint pen to push down on the lock button while pulling the cartridge lid open.
3. With the cartridge lid open, slide the disc out of the cartridge.



- | | |
|---|---------------|
| 1 | Locking Pin |
| 2 | Lock Button |
| 3 | Cartridge Lid |

Returning a disc to the cartridge

To return a disc to the cartridge, do the following steps:

Notes: Both the disc label and the cartridge label should be facing up. Handle the disc only by its edges.

1. Slide the disc into the cartridge.
2. Close the cartridge lid. Make sure the lock button snaps into position.
3. Install the locking pin.

Managing diskette drives

Learn about the features of specific diskette drives.

External USB 1.44 MB diskette drive (FC 2591)

Learn about the features of this media device.

The following provides information about the external USB 1.44 MB diskette drive.

Installation and removal	<p>To install this external USB 1.44 MB diskette drive, complete the following steps:</p> <ol style="list-style-type: none">1. Unpack the device and ensure you have all the cables and parts.2. Connect the USB cables to an available USB port on the system unit.3. Wait for the system to recognize the new device (approximately 1-3 minutes). <p>To remove this external USB 1.44 MB diskette drive, complete the following steps:</p> <ol style="list-style-type: none">1. Ensure you complete any processes running from or to the diskette drive.2. Eject any diskette you have in the device.3. Disconnect the device from the system unit.
Description	<p>The externally attached USB diskette drive provides storage capacity up to 1.44 MB on a high-density (2HD) diskette and 720 KB on a double-density diskette. Includes 350mm (13.7 in) captured cable with standard USB connector.</p> <p>Limitations:</p> <ul style="list-style-type: none">• Maximum 1 USB diskette per adapter• Up to 1 Keyboard and Mouse also supported on the adapter with the diskette drive at the same time• No system boot capability• Not to be operated upside down or with eject button down <p>Characteristics:</p> <ul style="list-style-type: none">• FRU part number: 033P3339• Capacity - 1.44 MB (2HD disk) or 720 KB (double-density disk)• Physical Dimensions: Width=103mm (4.05 in), Height=17.6mm (.69 in), Depth=141.8-mm (5.58 in)• Color: Black• Data Rate: 12 Mbits/sec• Maximum Power Consumption: 2.36 Watt (seek)• Operates in all positions except those noted in the preceding limitations• Attributes provided: External diskette drive• Attributes required: 1 available USB port

Managing removable disk drives

Learn about using and managing removable disk drives. Find specifications and installation notes for specific drives.

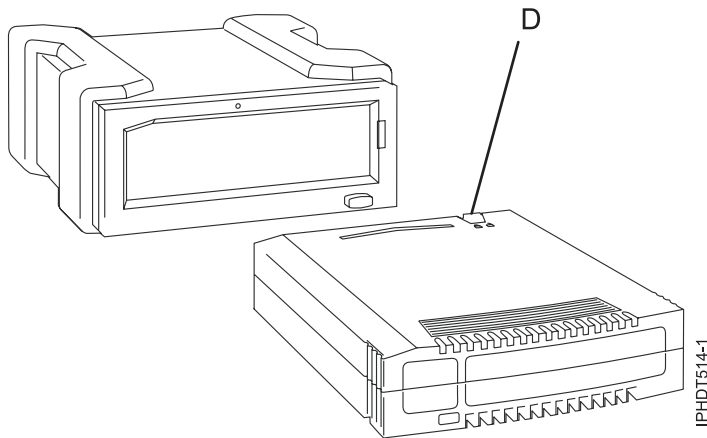
RDX USB External Dock (1104 and EU04) and RDX Removable Disk Drives (1106, 1107, EU01, EU08, and EU15)

Learn about the features of this drive.

Description

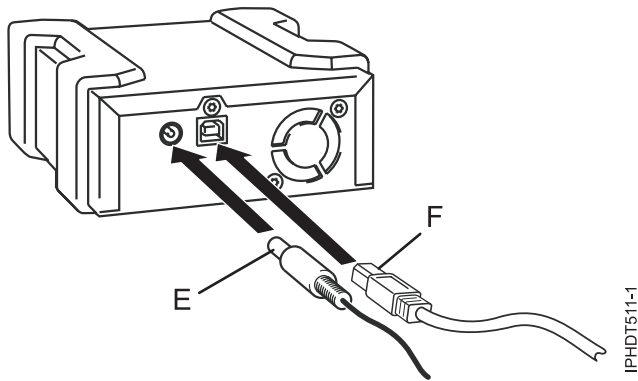
The USB removable disk drive consists of a docking station, which holds a removable disk drive. The docking station is available as an external device. The disk drive is a backup and restore device that can be used as an alternative to tape drives. The removable disk drive is not a replacement for regular disk drives and cannot be used as part of a disk array. The following illustrations show the external drives.

Figure 1. Front view and external drive with removable disk drive



D Write-protect switch

Figure 2. Rear view and connectors on the external drive



E Power connector

F USB connector

Feature codes and part numbers

Learn about the feature codes (FCs) and part numbers for the USB Removable Disk Drive.

FC 1104 - USB External Docking Station for Removable Disk Drive

FC 1104 uses an external USB cable to connect to an external USB port. The 1104 feature code includes a USB cable, an external power supply, and a power cord as part of the feature code.

FC 1104 provides the following parts:

46C5381 - USB external docking station

44E8889 - External USB cable

49Y9890 - External power supply with power cord and universal plugs for all supported geographies

39M5516 - Power cord (1 m) that connects the power supply to the rack power distribution unit

FC EU04 - USB External Docking Station for Removable Disk Drive

FC EU04 uses an external USB cable to connect to an external USB port. The EU04 feature code includes a USB cable, an external power supply, and a power cord as part of the feature code.

FC EU04 provides the following parts:

46C2333 (FRU: 46C2347) - External RDX USB 3.0 Dock

05H5081 (FRU: 05H5080) - External USB 3.0 Cable (2.7 m or 8'10")

81Y3649 (FRU: 81Y8905) - External power supply with power cord and universal plugs for all supported geographies

39M5516 (FRU: 39M5516) - Power cord (1 m) that connects the power supply to the rack power distribution unit

Removable disk drives

Table 1. Removable disk drives

Feature code	Part number	Description
1106	46C5375	160 GB Removable Disk Drive
EU08	46C5377	320 GB Removable Disk Drive
1107	46C5379	500 GB Removable Disk Drive
EU01	46C2335	1 TB Removable Disk Drive
EU15	46C2831	1.5 TB Removable Disk Drive

Storing removable disk drives

Store removable disk drives in their protective containers, on a flat surface with the top side up. The storage area must be clean and dry, must have normal room temperature, and must be away from any magnetic fields. For best storage life, use the removable disk drives every six months.

Supported USB adapters and cables

Attention: The docking station only supports the USB cable that is provided as part of the feature code. The docking station does not support attachment by using USB hubs, add-on USB cables, or USB cable extenders.

The external docking station can be connected to the external, integrated USB ports on POWER7[®] processor-based systems or can be connected to the USB ports on 4-Port USB PCI Express Adapter (FC 2728).

The internal docking station can be connected to the internal USB port on the control panel of POWER7 processor-based systems.

Note: When the USB port on the control panel is used for the docking station, the port is disabled for any other use. This information does not apply to the 31E/2B, 31E/1C, 31E/1D, 31E/2C, or 31E/2D system.

Note:

Specifications

Interface

USB 2.0

Mksysb

Yes

Bootable

Yes

Physical form factor (internal docking station)

5.25 inch half high

Environmental

USB Removable Disk Drive	Operating conditions	Non-operating conditions
Temperature	5 -55 C	-40 -65 C
Relative humidity	8 - 90% noncondensing	5 - 95% noncondensing
Maximum wet bulb temperature	29.4 C noncondensing	40 C noncondensing
Maximum temperature gradient	20 C per hour	20 C per hour
Altitude	-300 to 3048 m (10,000 ft)	-300 to 12,192 m (40,000 ft)

Supported operating systems

USB Removable Disk Drive is supported on the following versions of operating systems:

- AIX 5L Version 5.3 with the 5300-11 Technology Level, or later
- IBM[®] i 7.1 with the Technology Refresh PTF Group Level 5, or later

- AIX Version 6.1 with the 6100-04 Technology Level, or later
- Red Hat Enterprise Linux version 3 Update 7, or later
- SUSE Linux Enterprise Server 10, or later

Using the USB Removable Disk Drive for backup and restore

The disk drive is a backup and restore device that can be used as an alternative to tape drives. The removable disk drive is not a replacement for regular disk drives and cannot be used as part of a disk array.

Note: If power is lost during a backup to the disk, the data can be compromised. Verify the data or rerun the backup.

Using the drive with AIX

AIX names the drive `usbmsx`, for example, `usbms1`, and `usbms2`. AIX also can use the device as a raw device, for example, `rusbms1` and `rusbms2`.

AIX uses the removable disk drive differently depending on the program being used. The AIX `mksysb` command builds a list of files to back up, creates a universal disk format (UDF) file system, and puts a boot image and the root volume group on the removable disk drive. When the `mksysb` process is complete the removable disk drive can be used to boot the system. If you mount the removable disk drive, you can display and copy files to and from the UDF file system on the removable disk drive.

The AIX `tar`, `backup`, `restore`, `dd`, and `cpio` commands can write to the removable disk drive as a raw device or non raw device. You might get improved performance by using the device as a raw device.

See the AIX documentation for additional information.

Using the drive with IBM i

IBM i configures the drive as a removable media drive with a name in the format `RMSxx`, for example, `RMS01`.

The drive and cartridge are used with optical commands and utilities (for example, `WRKOPTVOL` and `INZOPT`), and reports media in the `QOPT` file system.

See the IBM i documentation for information about using IBM i copy and backup commands.

Using the drive with Linux

Linux configures the drive as a disk drive with a name in the format `sdx`, for example, `sda`, `sdb`, and `sdc`.

See the Linux documentation for information about using Linux copy and backup commands.

Setting the write-protect switch

The removable disk drives have a red, write-protect tab that is located on the back of the drive. To write-protect a drive, slide the write-protect tab toward the lock symbol. To disengage write protection, slide the tab to the unlock symbol.

Using the emergency eject function

To eject a removable disk drive, press the eject button. If a drive is stuck, complete the following steps:

1. If you are using the internal docking station, power off the system. If you are using the external docking station, unplug the power cable from the device.
2. Insert a large straightened paper clip (or similar object) into the emergency eject hole. Do not insert the object in the hole at an angle. Keep the object straight and apply some force to eject the drive.
3. When the drive has been ejected by the docking station, grasp the exposed sides of the drive and pull the drive straight out.
4. Restart your system to reset the docking station. If you are using the external docking station, reconnect the power cable for the docking station and then restart the system.

Status lights

Learn about the power indicator and drive indicator status lights on the USB Removable Disk Drive.

Power indicator

The eject button is illuminated by a power indicator light. The following table describes the operation of the power indicator.

Table 2. Power[®] indicator

Indicator status	Meaning	Description
Off	No power	Docking station does not have power.
Steady green	Ready	Power is on and the docking station is working correctly.
Flashing green	Ejecting	Cartridge is ejecting.
Flashing amber	Fault	Docking station has detected a fault condition with the docking station.

Removable disk drive indicator

The disk drive has an indicator light that displays the status of the drive. The following table describes the operation of the drive indicator.

Table 3. Cartridge indicator

Indicator status	Meaning	Description
Off	Not ready	Drive is not inserted correctly or the docking station has no power.
Steady green	Ready	Drive is ready.
Flashing green	Activity	Drive is reading, writing, or seeking.
Flashing amber	Fault	Docking station has detected a fault condition with the cartridge.

Installing the docking station for the removable disk drive

Keep in mind the following points when you install FC 1104, the USB External Docking Station for Removable Disk Drive:

- A rack shelf is not included with FC 1104.
- The docking station can be rested on a flat surface in a rack or on a table top next to a rack.
- Ensure that the device is on a flat surface, is right-side up, and is not likely to be bumped, dropped, or otherwise damaged or jolted.

- If the docking station is placed by itself on a rack shelf, it will have space on the sides of the device. No filler panels are provided with the docking station.
- If the docking station is placed on a rack shelf, ensure that the docking station has sufficient air flow but that it does not affect the air flow of the other systems in the rack.
- Do not block the fan on the back of the docking station.

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Electronic emission notices

When attaching a monitor to the equipment, you must use the designated monitor cable and any interference suppression devices supplied with the monitor.

Class A Notices

The following Class A statements apply to the servers.

Federal Communications Commission (FCC) statement

Note: This equipment has been tested and found to comply with the limits for a Class A 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 commercial environment. 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. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Properly shielded and grounded cables and connectors must be used in order to meet FCC emission limits. IBM is not responsible for any radio or television interference caused by using other than recommended cables and connectors or by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Industry Canada Compliance Statement

This Class A digital apparatus complies with Canadian ICES-003.

Avis de conformité à la réglementation d'Industrie Canada

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

European Community Compliance Statement

This product is in conformity with the protection requirements of EU Council Directive 2004/108/EC on the approximation of the laws of the Member States relating to electromagnetic compatibility. IBM cannot accept responsibility for any failure to satisfy the protection requirements resulting from a non-recommended modification of the product, including the fitting of non-IBM option cards.

This product has been tested and found to comply with the limits for Class A Information Technology Equipment according to European Standard EN 55022. The limits for Class A equipment were derived for commercial and industrial environments to provide reasonable protection against interference with licensed communication equipment.

European Community contact:
IBM Deutschland GmbH
Technical Regulations, Department M372
IBM-Allee 1, 71139 Ehningen, Germany
Tele: +49 7032 15 2941
email: lugi@de.ibm.com

Warning: This is a Class A product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

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Japanese Electronics and Information Technology Industries Association (JEITA) Confirmed Harmonics Guideline (products less than or equal to 20 A per phase)

高調波ガイドライン適合品

Japanese Electronics and Information Technology Industries Association (JEITA) Confirmed Harmonics Guideline with Modifications (products greater than 20 A per phase)

高調波ガイドライン準用品

Electromagnetic Interference (EMI) Statement - People's Republic of China

声 明

此为 A 级产品,在生活环境中,
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在这种情况下,可能需要用户对其
干扰采取切实可行的措施。

Declaration: This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may need to perform practical action.

Electromagnetic Interference (EMI) Statement - Taiwan

警告使用者：

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居住的環境中使用時，可
能會造成射頻干擾，在這
種情況下，使用者會被要
求採取某些適當的對策。

The following is a summary of the EMI Taiwan statement above.

Warning: This is a Class A product. In a domestic environment this product may cause radio interference in which case the user will be required to take adequate measures.

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Dieses Produkt entspricht den Schutzanforderungen der EU-Richtlinie 2004/108/EG zur Angleichung der Rechtsvorschriften über die elektromagnetische Verträglichkeit in den EU-Mitgliedsstaaten und hält die Grenzwerte der EN 55022 Klasse A ein.

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Verantwortlich für die Einhaltung der EMV Vorschriften ist der Hersteller:

International Business Machines Corp.

New Orchard Road

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Tel: 914-499-1900

Der verantwortliche Ansprechpartner des Herstellers in der EU ist:

IBM Deutschland GmbH

Technical Regulations, Abteilung M372

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email: lugi@de.ibm.com

Generelle Informationen:

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Class B Notices

The following Class B statements apply to features designated as electromagnetic compatibility (EMC) Class B in the feature installation information.

Federal Communications Commission (FCC) statement

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.

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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 an IBM-authorized dealer or service representative for help.

Properly shielded and grounded cables and connectors must be used in order to meet FCC emission limits. Proper cables and connectors are available from IBM-authorized dealers. IBM is not responsible for any radio or television interference caused by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Industry Canada Compliance Statement

This Class B digital apparatus complies with Canadian ICES-003.

Avis de conformité à la réglementation d'Industrie Canada

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

European Community Compliance Statement

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Deutschland: Einhaltung des Gesetzes über die elektromagnetische Verträglichkeit von Geräten

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Tel: 914-499-1900

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Technical Regulations, Abteilung M372
IBM-Allee 1, 71139 Ehningen, Germany
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