



CODONICS[®]

We bring the future into focus

Infinity[®]
***Medical Image
Expansion Module***

User's Manual

Codonics[®] Catalog Number INFEM-MNLU

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Codonics, Inc.

17991 Englewood Drive

Middleburg Heights, OH 44130 USA

440-243-1198 Phone

440-243-1334 Fax

E-mail info@codonics.com

www.codonics.com

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Preface

Conventions Used in This Manual


Bulleted Lists

Bullets are used to display a list of nonprocedural items. For example:

When finding a suitable location for the Infinity Expansion Module, use the following guidelines:

- Do not block ventilation on the front, rear, top, bottom, and sides of the Infinity Expansion Module.
- Make sure that the countertop or work surface will not vibrate or shake when the Infinity Expansion Module is operating.

Numbered Steps

The  icon indicates the beginning of a procedure. The steps in a procedure are numbered. For example:



To replace the
chassis

1. Unpack the Infinity Expansion Module replacement chassis.
2. Place the replacement chassis on a flat, solid surface near the original chassis.
3. Remove the tape securing the front cover.

Notes

Notes contain additional information related to a topic or procedure. For example:



NOTE: This will power up the main chassis and all expansion modules.

Cautions and Warnings

Cautions alert you to actions or situations that could cause harm to equipment or data. For example:



CAUTION Only trained users should install and configure the system.

Warnings alert you to actions or situations that could result in personal injury. For example:



WARNING Grounding reliability can be achieved only when the Infinity Expansion Module or any externally powered accessory (UPS) is connected to an equivalent receptacle marked “Hospital Only” (that is, “Hospital Grade”).

Important Information and Filenames

Bold type is used for emphasis, command names, and paths or filenames. For example:

- When you have completed entering the system configuration parameters, click the **Save** button and close the window.
- In Windows, navigate to and run the **Configurator.exe** file, which is stored at the root level of the SmartDrive.

Purpose and Scope

Refer to this User's Manual for procedures on how to perform the Infinity Expansion Module user operations, including:

- Setting up the hardware and software
- Maintaining the Infinity Expansion Module
- Monitoring system status and troubleshooting common problems

Product Information

For technical assistance with the Infinity Expansion Module, call Codonics Technical Support at the following number:

Phone: +1-440-243-1198
Toll Free: 800-444-1198 (USA only)

Codonics Customer Service is available weekdays from 8:30 AM to 5:30 PM EST (U.S. holidays excluded). Technical Support is also available online via e-mail and the Codonics web site:

E-mail: support@codonics.com
Web site: www.codonics.com

General product information can also be requested by sending e-mail to:

E-mail: info@codonics.com

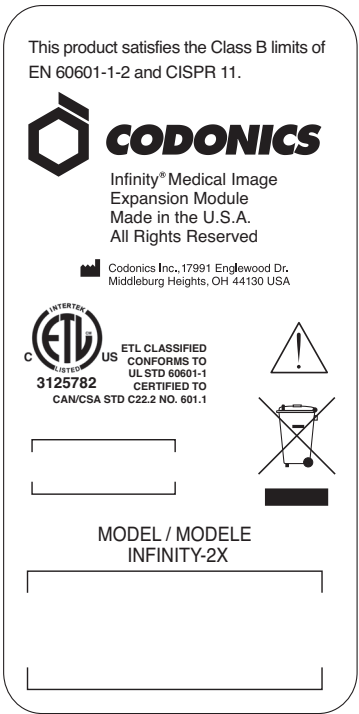
Please include your postal mailing address and telephone number in the e-mail message. Basic product information is returned via e-mail. Complete product literature is sent by postal mail.

Warnings and Limitations of Use

Safety and Compliance Label

The product is in compliance with various regulations, details of which are listed in Appendix B.

The Infinity Expansion Module safety and compliance label is located on the left side of the chassis (shown on the following page).



Safety and compliance label location



Infinity Expansion Module safety and compliance label, located on left side of chassis

Voltage Warning

The exclamation point within a triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying this device.



REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. REMOVAL OF LABELS, COVERS, OR ENCASMENT FASTENERS MAY VOID THE WARRANTY.

THIS APPARATUS MUST BE ELECTRICALLY GROUNDED.

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS DEVICE TO RAIN OR MOISTURE.

EQUIPMENT IS NOT TO BE USED AS A COMPONENT OF A LIFE SUPPORT SYSTEM. Life support devices or systems are devices or systems that support or sustain life, and whose failure to perform can be reasonably expected to result in a significant injury or death to a person. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.



WARNING The power cord plugs at the rear panels of the main chassis and expansion modules are the main disconnects for the Infinity system.



WARNING To disconnect power to the Infinity Expansion Module prior to servicing it, shut down the system (refer to “Shutting Down and Rebooting” on page 2-24) and then disconnect the power cord plug at the rear panel of the module.



WARNING Grounding reliability can be achieved only when the Infinity Expansion Module or any externally powered accessory (UPS) is connected to an equivalent receptacle marked “Hospital Only” (that is, “Hospital Grade”).



WARNING External equipment intended for connection to signal input, signal output, or other connectors, shall comply with relevant IEC standard (e.g., IEC 60950 for IT equipment and the IEC 60601 series for medical equipment). In addition, all such combinations - *systems* - shall comply with the IEC 60601-1-1 standard, safety requirements for medical electrical systems. Equipment not complying to IEC 60601 shall be kept outside the patient environment, as defined in the standard. Any person who connects external equipment to signal input, signal output, or other connectors has formed a system and is therefore responsible for the system to comply with the requirements of IEC 60601-1-1. If in doubt, contact a qualified technician or Codonics Technical Support for approved configurations.

Dangers Électriques

Le point d'exclamation situé à l'intérieur d'un triangle équilatéral représente un point d'instruction important dans l'utilisation de cette appareil.



ADRESSEZ-VOUS AU PERSONNEL QUALIFIÉ. LE FAIT DE RETIRER LES ÉTIQUETTES OU DE DEMONTER LE COVERCLE ANNULENT LA GARANTIE.

CET APPAREIL DOIT ÊTRE RELIÉ À LA TERRE.

N'EXPOSEZ PAS CET APPAREIL À LA PLUIE OU L'HUMIDITÉ, EN RAISON DU RISQUE DE FEU OU DE DÉCHARGES ÉLECTRIQUES.

Cet appareil ne doit pas être utilisé comme composant d'un système d'assistance vitale. Cet appareil ne doit pas être utilisé dans des conditions où la défaillance de l'appareil pourrait entraîner blessure ou mort d'homme.



ATTENTION Les fiches d'alimentation à l'arrière de l'appareil et les extensions de mémoire sont le système principal de coupure de l'appareil.



ATTENTION Avant d'intervenir sur l'extension de mémoire Infinity, veuillez à toujours l'arrêter (veuillez référer à "Shutting Down and Rebooting" on page 2-24) et n'oublier de débrancher le fiche d'alimentation à l'arrière de la machine.



ATTENTION Une mise à la terre fiable est possible seulement pendant que l'Infinity ou l'accessoire d'alimentation externe (UPS) est relié aux appareils aussi " Hospital Only " (de qualité hospitalière).



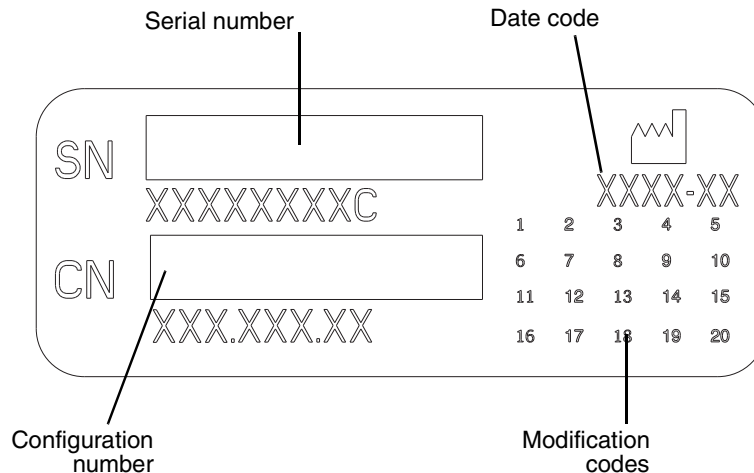
ATTENTION Toute intention de connections externe d'équipement vers le signal d'entrée ou de sortie ou autre connecteur, doit être compatible avec la norme IEC standard (IEC 60950 pour les équipements IT et IEC 60601 pour les équipements médicaux). Tout les combinaisons de systèmes doivent être compatible avec IEC60601-1-1- standard, sécurité requise pour les équipements électriques médicaux.

Tout équipement non compatible avec IEC 60601 doit être mis à l'écart de l'environnement patient, comme définis dans le standard. Toute personne qui connecte un équipement externe vers une entrée signal, ou sortie signal ou autres connecteur, est responsable de la compatibilité avec IEC 60601-1-1. Si vous avez un doute, contactez un technicien qualifié ou le support technique de Codonics pour l'approbation des configurations.

Serial Number, Configuration Number, Date Code, and Modification Codes

The serial number, configuration number, date code, and modification codes are located on the safety and compliance label, which is on the left side of the chassis.

- The serial number (SN) uniquely identifies the unit.
- The configuration number (CN) details the build configuration.
- The modification codes are to the right of the CN number and are a series of 20 numbers. When any of these numbers are blocked out, that identifies a modification that was made to the unit.
- The date code is in YYYY-MM format below the factory date code symbol.



Serial number, configuration number, date code, and modification codes

Potential for Radio Frequency Interference on Device Operation

Both portable and mobile RF communications equipment can affect medical electrical equipment, including the Codonics Infinity Expansion Module. Keep such RF communications equipment out of the immediate area.

Potential for Radio and Television Interference

This product is in conformity with the protection requirements of EC Council directive 89/336/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility. This product satisfies the Class B limits of EN55011. A declaration of conformity with the requirements of the Directive has been signed by the Director of Quality Assurance and Regulatory Affairs.

Safety Precautions

- Never connect the Infinity Expansion Module power adapter to any outlet or power supply that has a voltage or frequency different than that specified (100 – 240 VAC, 50/60 Hz).
- Use only the external AC power adapter provided with the Infinity Expansion Module (Codonics part number SP-00448).
- When replacing the chassis, always shut down the Infinity system (refer to “Shutting Down and Rebooting” on page 2-24) and disconnect the AC power cords from the main chassis and any expansion modules prior to servicing it.
- Damage to a power cord is a fire and shock hazard. When unplugging a power cord, hold it by the plug only and remove the plug carefully.

- If a power cord or power adapter needs to be replaced, replace it only with another Codonics power cord or Codonics power adapter. Alternatively, replace it with a power cord or power adapter manufactured specifically for your power configuration.
- If the device is smoking or making unusual sounds, power off and unplug the device immediately (refer to “Shutting Down and Rebooting” on page 2-24).
- Do not insert foreign objects of any kind into the device; doing so can constitute a safety hazard and cause extensive damage.
- Do not place any liquid containers on the device. If, for some reason, liquid seeps into the device, power off the device and unplug the power cord from the source outlet. If used without taking corrective measures, the device may be damaged.
- Do not use the device near flammable gases.

Précaution d’Emploi

- *Ne jamais brancher cet appareil sur une source d’alimentation électrique dont la tension ou la fréquence diffèrent des valeurs indiquées (100 – 240 VAC, 50/60 Hz).*
- *Utiliser uniquement le bloc d’alimentation fourni avec l’appareil (numero de pièce Codonics SP-00448).*
- *Avant de remplacer le bloc d’alimentation ou le châssis principal, veuillez à toujours éteindre l’appareil puis l’interrupteur situé à l’arrière et enfin, n’oubliez pas de débrancher le câble secteur.*
- *Un cordon d’alimentation endommagé est une cause d’incendie ou de décharge électrique. En déconnectant le cordon d’alimentation, tenez-le seulement par la prise et retirez la prise soigneusement.*
- *Si le cordon d’alimentation ou le bloc d’alimentation doit être remplacé, utilisez un cordon d’alimentation ou un bloc d’alimentation Codonics fabriqué spécifiquement pour votre appareil.*

- *Si l'appareil fume ou émet des bruits inhabituels arrêtez-le immédiatement et débranchez le câble secteur.*
- *N'introduisez aucun objet étranger dans l'appareil, cela peut être une source de danger et peut causer de graves dommages.*
- *Ne déposez aucun récipient à coté de l'appareil. Si pour une raison quelconque un liquide est renversé à l'intérieur, arrêtez immédiatement l'appareil et débranchez le câble secteur. Toute nouvelle utilisation de l'appareil sans intervention peut causer de graves dommages.*
- *Ne pas utiliser l'appareil à coté d'une source de gaz inflammable.*

Location Precautions

- The device's operating ambient temperature range is 15–30°C (59–86°F), with a relative humidity of 20%–80%.
- If the device is moved quickly from an extremely cold place to a warmer one, condensation is likely to form. Do not use the device if condensation has formed. Wait until the condensation has evaporated. You can speed up the evaporation time by moving the device to a drier location.
- Ventilation slots and holes are provided on the front, rear, top, bottom, and sides of the device. Place the device on a level, stable surface and locate it at least 5 cm (2 in.) between chassis and other chassis or wall to ensure proper ventilation.
- Do not stack the main chassis and/or expansion modules on top of one another.



CAUTION Adequate ventilation is required for proper operation of the device.

- When installed with a UPS, the system should not be located in patient care environments unless the UPS used or an appropriate isolation device meets local regulatory requirements.



WARNING Grounding reliability can be achieved only when the Infinity system or its uninterruptable power supply (UPS) is connected to an equivalent receptacle marked “Hospital Only” (that is, “Hospital Grade”).



WARNING Customers should consider using an appropriate isolation transformer or a medical grade UPS in environments that require less than 300 μ A chassis leakage. Please check local/regional and hospital-specific ordinances to determine the applicability of any/all standards based on the intended use and placement of the Infinity system.

- Do not place objects on top of the device.
- Do not place device in a high humidity or high dust area. Airborne dirt particles can cause interference with the operation of the device. Avoid placing the device in areas where ventilation ducts, open doors, or frequent passers-by might expose the device to high levels of debris.
- Do not locate the device in hot-springs areas where hydrogen sulfide and acidic ions are likely to be generated.
- Do not locate the device where there are oily fumes and vapors.
- Do not locate device near sources of high RF energy, high magnetic fields, or ionizing radiation.
- Do not place the Infinity Expansion Module near heat sources such as radiators or air ducts, or in a location subject to direct sunlight, excessive dust, mechanical vibration, or shock.

- Make sure that the countertop or work surface will not vibrate or shake when the Infinity Expansion Module is operating.

Environnement de Fonctionnement

- *Les conditions normales d'utilisation de l'appareil sont : une température de 15 à 30°C (59 à 86°F) et une humidité relative de 20 % à 80 %.*
- *Une variation rapide de température risque de provoquer de la condensation. Dans ce cas n'utilisez pas l'appareil, attendre la condensation se soit évaporée. Vous pouvez accélérer cette évaporation en déplaçant l'appareil dans un endroit sec.*
- *Les fentes de ventilation se trouvent à l'avant et à l'arrière de l'appareil. Placez l'appareil sur une surface stable et au moins 5 cm (2 in.) des murs et d'autres objets pour assurer une ventilation correcte.*
- *Ne placez pas le châssis principal et/ou des appareils d'expansion, l'un sur l'autre.*



ATTENTION Une ventilation correcte est nécessaire au bon fonctionnement de l'appareil.

- *En installation avec un onduleur (UPS), le système doit être mis à l'écart de l'environnement patient sauf en connexion avec un UPS ou un transformateur d'isolement qui respecte les ordonnances spécifiques locale/régionale.*



ATTENTION Une mise à la terre fiable est possible seulement pendant que Infinity ou son onduleur (UPS) s'est connecté aux appareils marqué "Hospital Only" (de qualité hospitalière).



ATTENTION L'utilisateur doit considérer l'utilisation d'un transformateur d'isolement ou un UPS médical dans un environnement qui nécessite un courant de fuite de moins de 300 μ A. Merci de vérifier les ordonnances spécifiques locale/régionale et hôpitaux afin de déterminer l'application de n'importe quel/touts standard lié au placement et à l'utilisation du produit Infinity.

- *Ne pas poser d'objets sur l'appareil. Ils risquent de bloquer la ventilation ou de fendre le couvercle.*
- *Ne placez pas l'appareil dans une zone propre et non-humide. Des particules de poussières peuvent causer des dysfonctionnements. Évitez de placer l'appareil à proximité d'une bouche de ventilation, d'une porte, ou d'un lieu très fréquenté car cela pourrait exposer l'appareil à la poussière.*
- *Ne placez pas l'appareil à proximité d'une source de chaleur ou de substances acides.*
- *Ne placez pas l'appareil dans une pièce où il y a des vapeurs huileuses et grasses.*
- *Ne placez pas l'appareil près des sources d'énergie RF, des champs hauts-magnétiques, ou du rayonnement ionisant.*
- *Ne placez pas l'appareil d'expansion à proximité des sources de chaleur comme des radiateurs ou des conduits d'air. À protéger contre les rayons solaires, la poussière et les vibrations mécaniques.*
- *Assurez-vous que le plan de travail soit calme pendant que l'appareil d'expansion est allumé.*

Cleaning Precautions

- Plastic components are used in the device's construction. Coat flecking and deformation are likely to occur if the device is wiped with chemical dusters, benzene, thinners, insecticides, or other solvents. Rubber and PVC materials left in contact with the device for extended times will cause damage. Never use petroleum-based solutions or abrasive cleaners.
- To clean the chassis enclosure, first shutdown and disconnect power to the Infinity main chassis and any expansion modules (refer to "Shutting Down and Rebooting" on page 2-24). Clean the enclosure with a soft cloth **slightly** moistened with a mild soap and water solution. Allow the enclosure to completely dry before operating the device again.

Précautions d'Entretien

- *Cet appareil comporte plusieurs pièces en plastique. Des taches et des déformations peuvent être provoquées par l'utilisation de chiffon imbibé de benzène, d'essences, d'insecticides, ou d'autres solvants. N'utilisez jamais solution à base de pétrole.*
- *Pour nettoyer le baie de châssis, veuillez l'éteindre et débrancher le cordon d'alimentation pour l'Infinity et tous les appareils d'expansion (voir sur "Shutting Down and Rebooting" on page 2-24). Nettoyez la baie avec un tissu doux légèrement humidifié avec une solution à base d'eau et de savon non corrosif. Laissez sécher avant de remettre en fonction le système.*

Maintenance Precaution

The Infinity Expansion Module includes a robust user warning system to decrease the likelihood of permanent data loss. It is imperative that users act to prevent permanent data loss when the Infinity Expansion Module indicates that there is a problem. Failure to do so may invalidate the system warranty and will jeopardize system data.

Précaution d'Entretien

L'appareil the Infinity Expansion Module comprend un système d'utilisateur renforcé avec des avertissements afin de réduire le risque de la perte des données. L'inactivité en cas d'avertissement risque d'endommager la base de données.

Disposal Requirements

Disposal of this product and consumables shall be in accordance with all applicable laws and regulations in effect at the locality at the time of disposal. For additional information, refer to Appendix A, Hazardous Material Information.

Conditions et Règles d'Utilisation

L'utilisation de ce produit doit être conforme à toutes les lois et règlements applicables sur le lieu d'utilisation.

European Disposal Requirements

Codonics products and electronic accessory devices are not to be discarded or recycled; rather they are to be returned to the manufacturer. Contact Codonics directly or by the e-mail link provided for the latest information concerning:

- Identification of the country-specific Importer/Distributor/Producer
- Product return and treatment of our electronic products

Manufacturer: Codonics Incorporated
17991 Englewood Drive
Middleburg Heights, OH 44130 USA
Phone: +1-440-243-1198
Fax: +1-440-243-1334
E-mail: WEEE@codonics.com
www.codonics.com/weee

Codonics products and electronic accessory devices bearing the following symbol are subject to European Directive on Waste Electrical and Electronic Equipment (WEEE) 2002/96/EC, amended by Directive 2003/108/EC. The EN 50419 symbol indicates separate collection and return required.



EN 50419 symbol

Indications for Use

The Infinity Expansion Module is an accessory that provides storage expansion for the Infinity Medical Image Server. The Infinity Series of Medical Image Servers are Class 1 FDA 892.2020 medical image communications and storage appliances. The Infinity product integrates software and server hardware to provide DICOM digital images and data storage and retrieval from various sources including but not limited to CT, MR, US, NM/PET, CR/DR, secondary capture, film digitizers, workstations, and import gateways. Data can be stored, managed, and forwarded via software provided on the appliance, including non-diagnostic review/management of images on the server, and via optional web-enabled JPEG and web DICOM image delivery.

Users of this system are trained medical professionals, including but not limited to physicians, nurses, and radiological technicians. Those users responsible for the setup, operation, and maintenance of the system may include radiology technologists, PACS administrators and IT personnel. Primary applications include temporary and quarantine storage of large DICOM data sets directly from any modality and permanent storage of digital images in a pre-PACS environment with security and transaction logs to support patient confidentiality audit compliance.

1

Introduction

Welcome and Congratulations

Congratulations on your purchase of the Codonics® Infinity® Expansion Module!



We are pleased you chose the Infinity Expansion Module. We are confident that it will provide fast, reliable storage of medical images for your demanding data storage and distribution applications.

Product Features

The Infinity system is a DICOM storage device that provides a simple solution for storing and retrieving medical images. Applications such as direct modality storage of large DICOM data sets or storage of digital images in an environment without a centralized image server are ideal for an Infinity system.

Three Infinity Expansion Modules, each with up to four hard drives, can be connected to an Infinity main chassis, providing up to 9 TB of additional storage.

The expansion module is easily connected to the Infinity main chassis and to other expansion modules using a single SAS [Serial Attached SCSI (Small Computer System Interface)] cable.

2

Setting Up the Expansion Module

Finding a Location

When finding a suitable location for the Infinity Expansion Module, use the following guidelines:

- Place the Infinity Expansion Module on a flat, hard surface and in a location with adequate air circulation to prevent internal heat build up.
- Place the Infinity Expansion Module close enough to the Infinity main chassis or expansion module to which it will be connected so that the SAS cable can be connected between the two devices.

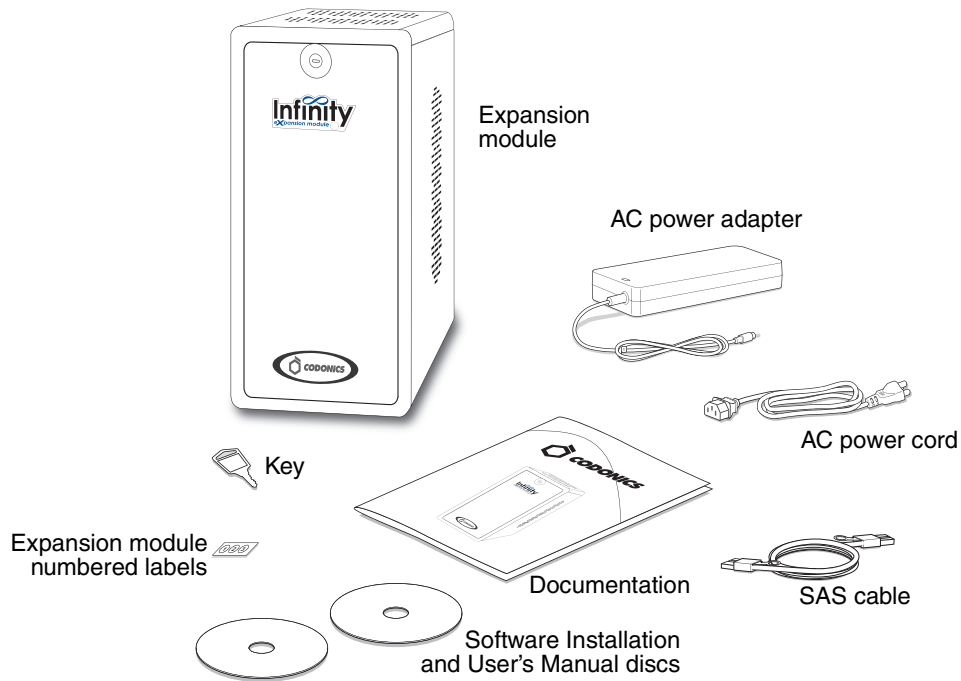
- Do not place the Infinity Expansion Module near heat sources such as radiators or air ducts, or in a location subject to direct sunlight, excessive dust, mechanical vibration, or shock.
- Do not block ventilation on the front, rear, top, bottom, or sides of the Infinity Expansion Module.
- Make sure that the countertop or work surface will not vibrate or shake when the Infinity Expansion Module is operating.

For additional location precautions, refer to “Location Precautions” on page xviii.

Components

Unpacked Components

The Infinity Expansion Module is shipped in one carton and contains the components shown in the following illustration.



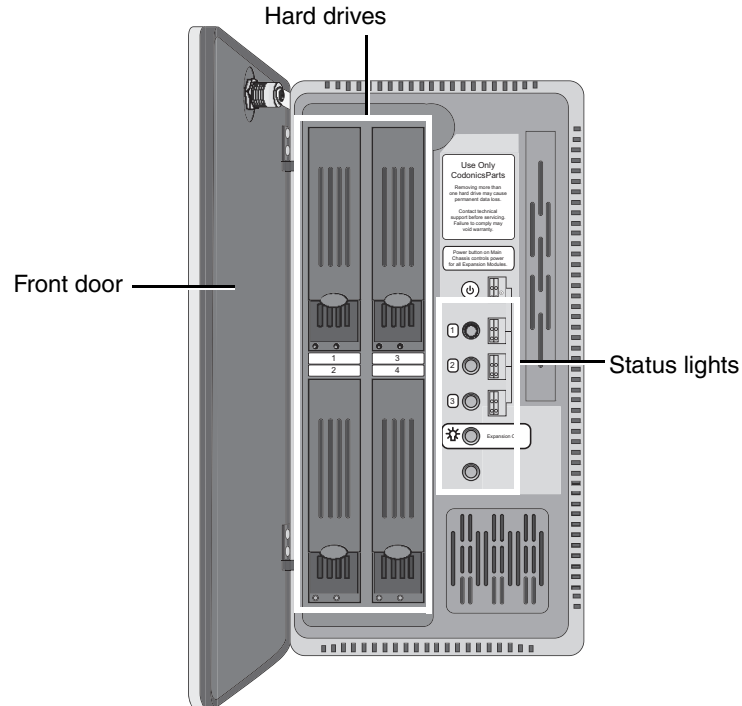
Unpacked Infinity Expansion Module components

Inspect the carton for damage that might have occurred during shipping. Report any damage to the shipping company.

Save the carton and packing materials, in case you ever need to transport the Infinity Expansion Module later.

Infinity Expansion Module Front Components

The following illustration is provided for reference as you perform the installation tasks in this chapter. It shows the components at the front of the Infinity Expansion Module, with the hard drives installed.

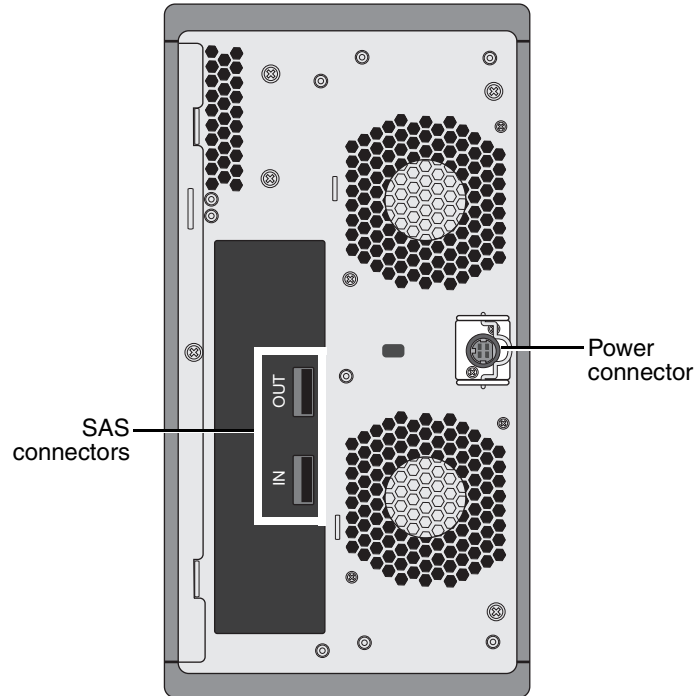


Infinity Expansion Module front panel components

- Opening the **Front door** provides access to the front panel components.
- The **Status lights** indicate Expansion status.
- The **Hard drives** are housed in the hard drive slots.

Infinity Expansion Module Rear Components

The following illustration is provided for reference as you perform the installation tasks in this chapter. It shows the input/output ports at the rear of the Infinity Expansion Module.



Infinity Expansion Module rear panel components

Installing Infinity Software

To support expansion modules, the Infinity software must be at v1.4.0 or later. If you have to upgrade the Infinity software, use the following general procedure.



CAUTION Only trained users should install the system software.



CAUTION The Infinity system is designed to run only authorized Infinity software. Do not install other software applications. This includes unauthorized anti-virus software. Installation of unauthorized software applications can affect system performance or interfere with system operation.



CAUTION Do not perform a full Infinity software installation or reinstallation unless directed to do so by Codonics Technical Support (+1 440-243-1198). A full installation removes all files, including all Windows files, all Infinity application files (except the Infinity configuration files), and the studies database.



To install
Infinity
software

1. Load the Operating Software disc in the disc drive on the front panel of the main chassis.
2. Reboot the Infinity system, as described in “Shutting Down and Rebooting” on page 2-24.

After rebooting, software installation begins. The Operating System disc will eject after approximately 20 minutes.

3. Wait 30 to 60 minutes for the installation to complete.

Six audible beeps indicate when software installation is complete, and the Infinity user interface will be accessible remotely.

Adding the Expansion Feature Key

Before using the Infinity Expansion Module for the first time, the Expansion Module feature key must be added to the system configuration on the main chassis SmartDrive. If you do not have the feature key for your expansion module, contact Codonics Technical Support (+1 440-243-1198) for the key.



CAUTION Only trained users should configure the system.



CAUTION Do not reconfigure or modify the software except as described in configuration tasks documented in this manual.

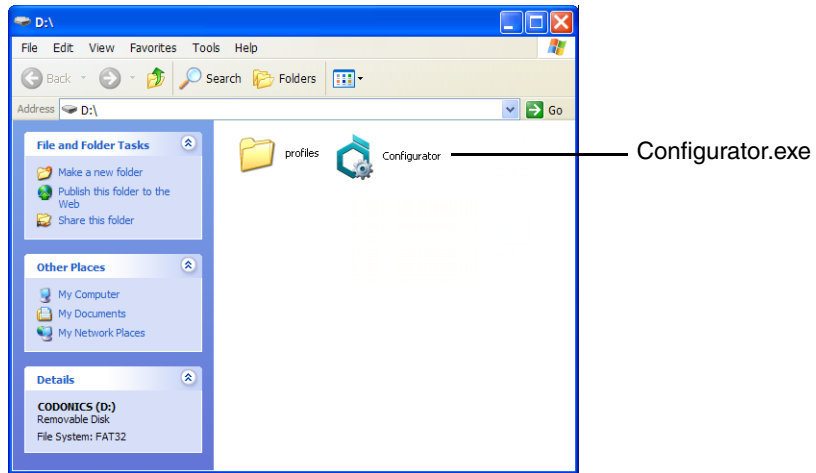


To add the
Expansion
Module
feature key

1. Remove the SmartDrive from the main chassis and insert it to a USB port on a PC.

The SmartDrive will appear as a standard USB flash drive.

2. In Windows, navigate to and run the **Configurator.exe** file, which is stored at the root level of the SmartDrive.

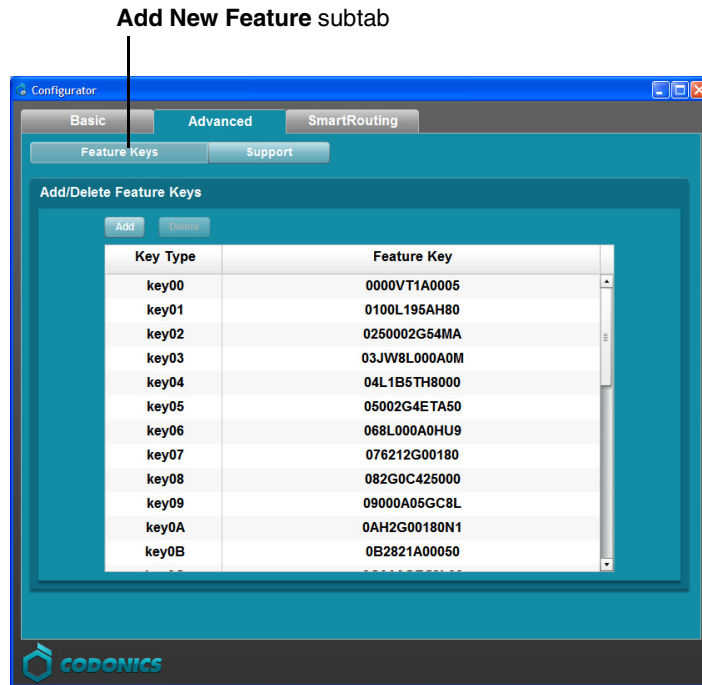


The Configurator application opens.

3. Click the **Advanced** tab.

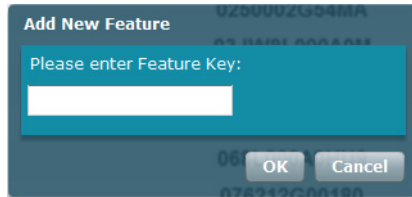


4. Click the **Feature Keys** subtab.



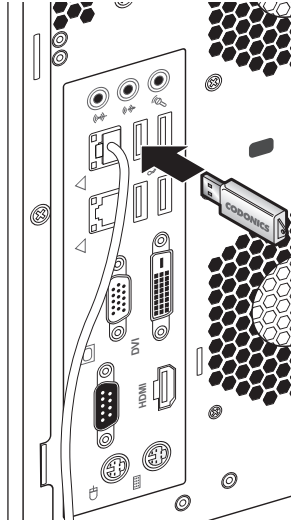
5. Click the **Add** button.

6. The **Add New Feature** dialog box displays.



7. Enter the Expansion Module feature key.
8. Click the **OK** button.
9. Make any other configuration changes that might be needed. For more information about the other configuration settings, refer to the Infinity User's Manual or Reference Guide.
10. When you have completed entering the system configuration parameters, click the **Save** button and close the window.
11. Unmount and remove the SmartDrive from the PC.

12. Insert the SmartDrive into its USB port on the Infinity main chassis (the USB port at the rear of an Infinity C is shown below).



Installing the Hardware



CAUTION Only trained users should install and configure the system.



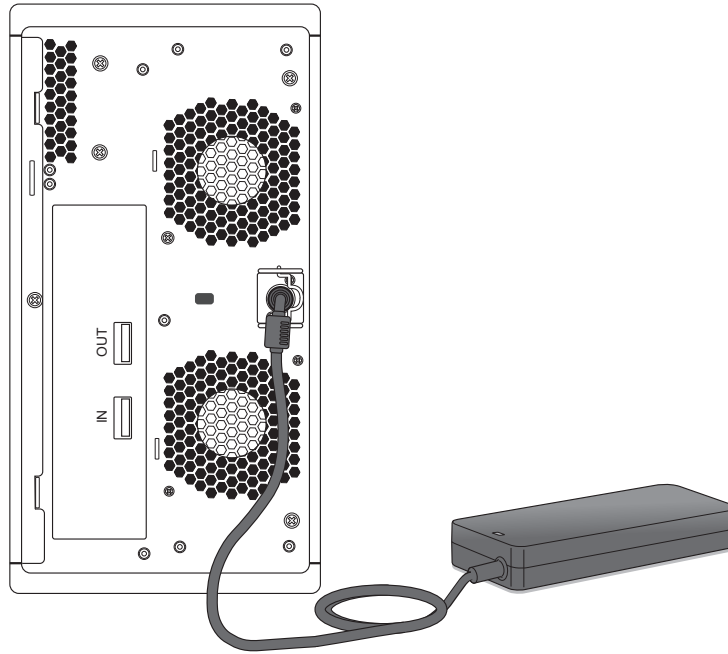
NOTE: *Infinity software version 1.4.0 or later must be installed on the Infinity main chassis before installing the expansion module hardware. For more information, refer to “Installing Infinity Software” on page 2-7. Also, the Expansion Module feature key must be added; refer to “Adding the Expansion Feature Key” on page 2-8.*



To install the hardware

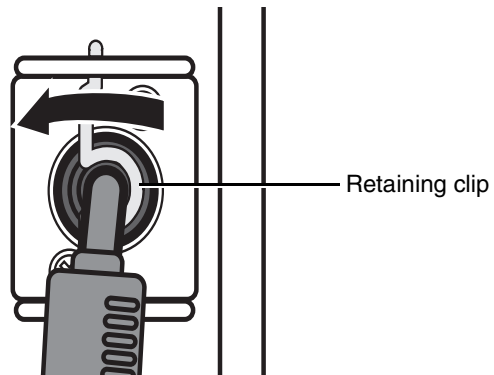
1. Shut down the Infinity system (refer to “Shutting Down and Rebooting” on page 2-24).
2. Unpack the hardware and remove any packing material.
3. Place the Infinity Expansion Module on a solid level surface.

4. Connect the power cord from the AC adapter.

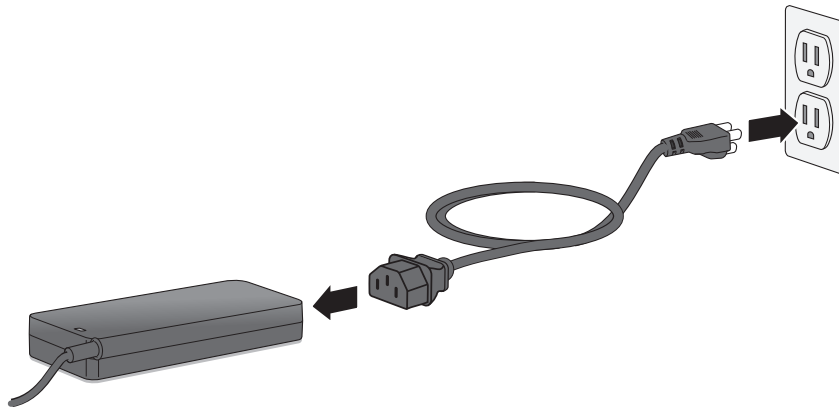


NOTE: The power cord plug at the rear panel of the chassis is the main disconnect for the Infinity Expansion Module.

5. Secure the power cord with the attached retaining clip.



6. Connect the AC power cord to the AC adapter.



NOTE: It is highly recommended that a UPS be used with the Infinity Expansion Module.

7. If not using a UPS, connect the AC power cord to a wall outlet (shown above).



CAUTION When installing the Infinity Expansion Module as part of a system such as the Infinity Medical Image Server, all attached system components must be connected to the same AC line power circuit.



CAUTION A UPS is highly recommended to reduce the risk of data loss due to power failures. An EN60950 UPS is not suitable for installation in a patient care area. Please check local/regional and hospital-specific ordinances to determine the applicability of any/all standards based on the intended use and placement of the Infinity system.

If not using a UPS, a multiple portable socket outlet (MPSO) can be used for powering the system.



WARNING Use of MPSOs to connect the equipment to the power outlet must be used as specified in IEC 60601-1-1. MPSOs used within the U.S. must contain “Hospital Grade” outlet sockets and be fitted with a Mains plug marked as being “Hospital Grade.”



WARNING When using an MPSO, do not connect items that are not specified as part of the system. An additional MPSO or extension cord must not be connected to the system.

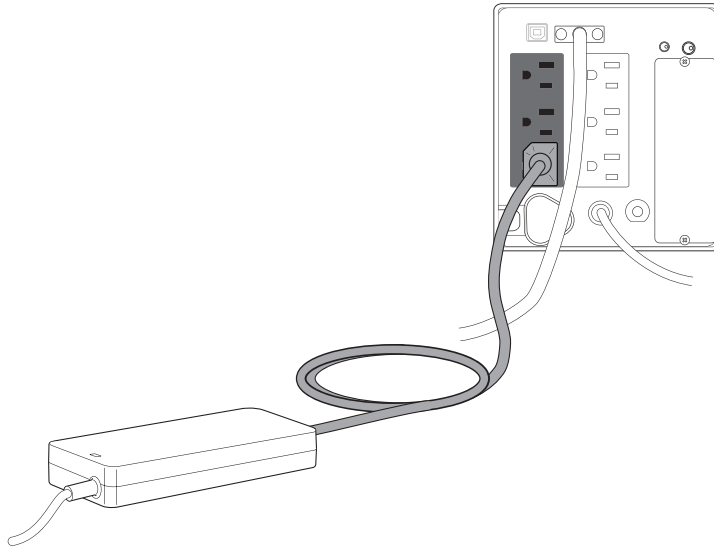


WARNING MPSOs must not be placed on the floor.



WARNING An MPSO’s maximum permitted load must exceed 1000 VA.

If using a UPS, connect the AC power cord to the UPS (shown below).



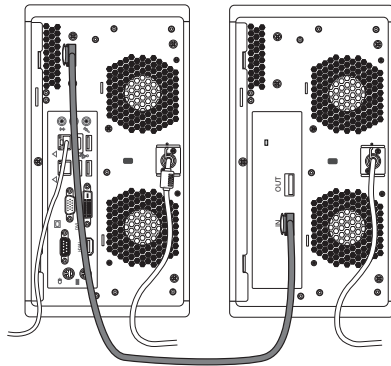
CAUTION Connect the Infinity Expansion Module to only high-quality electrical power. Do not expose the Infinity Expansion Module to suboptimal power conditions, including but not limited to power spikes or over- or under-voltage conditions.



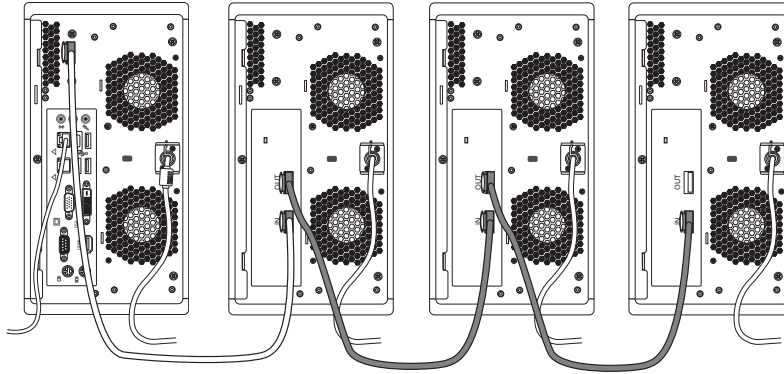
WARNING To disconnect overall power to the Infinity Expansion Module prior to servicing it, shut down the system (refer to “Shutting Down and Rebooting” on page 2-24) and then disconnect the power cord plug at the rear panel of the chassis.

8. Connect the expansion module's SAS cable(s).

When connecting a SAS cable between the main chassis and the first expansion module in a chain, the cable connects to the main chassis' SAS connector and to the first expansion module's SAS IN connector, as shown in the following illustration.



When connecting a SAS cable between expansion modules in the chain, the cable connects to the previous module's SAS OUT connector and the next module's SAS IN connector, as shown in the following illustration.



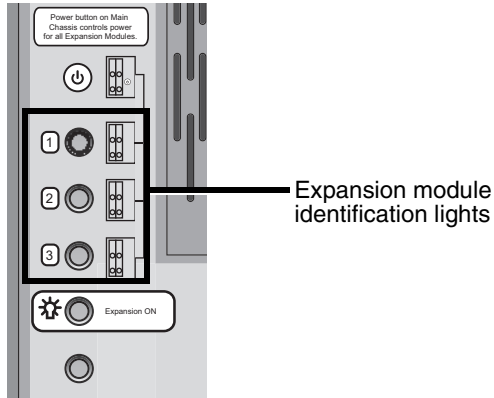
CAUTION Properly connect the SAS cables. Make sure that they are secure. Do not disconnect a SAS cable during system operation, as data could be lost.

9. Start up the Infinity system (refer to “Starting Up the Infinity System” on page 2-22).
10. Observe the expansion module identification lights on the expansion module front panel. This will indicate which number has been permanently assigned to the expansion module.



NOTE: Expansion module 1 powers on about one minute after the main chassis has powered on. The other expansion modules in the chain power on in sequence according to their assigned module number.

If the system includes multiple expansion modules, you might want to rearrange the expansion modules so that their physical order matches their assigned numbers.



11. Once you know the expansion module's assigned number, remove the appropriate number label from the Infinity Expansion Module numbers sticker and apply it to the nameplate on the front door.



Starting Up the Infinity System

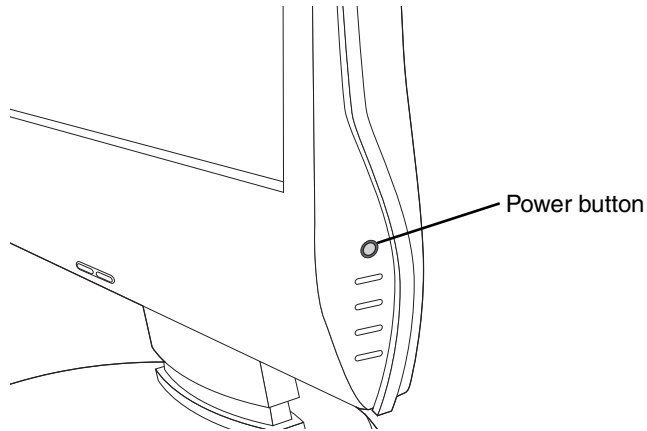


NOTE: The main chassis controls power to the expansion modules.



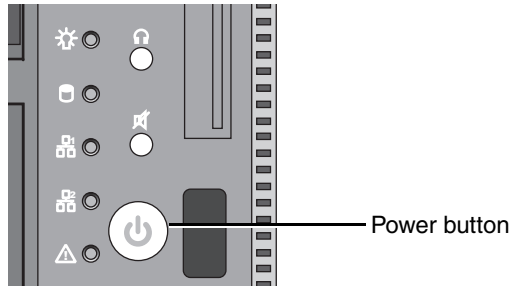
To start up the
Infinity system

1. If a monitor is installed, press the monitor power button.



2. If there is a UPS, power on the UPS.

3. Momentarily press the Power button at the front of the Infinity **main chassis** (the Infinity C Power button is shown below).



This will power up the main chassis and all expansion modules.



NOTE: Expansion module 1 powers on about one minute after the main chassis has powered on. The other expansion modules in the chain power on in sequence according to their assigned module number.

4. Wait approximately 5 minutes for startup to complete.

Shutting Down and Rebooting

Use the following procedure to shut down or reboot the Infinity system from a Remote Desktop Connection or from a monitor, keyboard, and mouse connected directly to the Infinity main chassis.

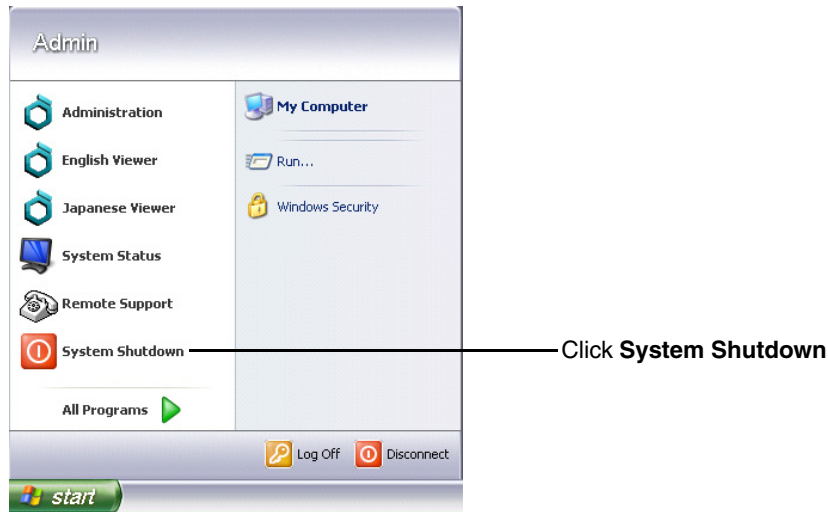


NOTE: The main chassis controls power to the expansion modules.



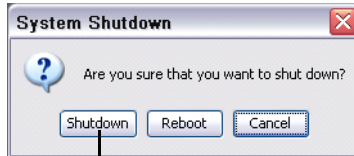
To shut down
or reboot the
system

1. Before attempting to shut down or reboot the system, make sure that all jobs have finished and all applications (for example, the Administration tool or Study Manager) are closed.
2. On the **Start** menu, click **System Shutdown**.



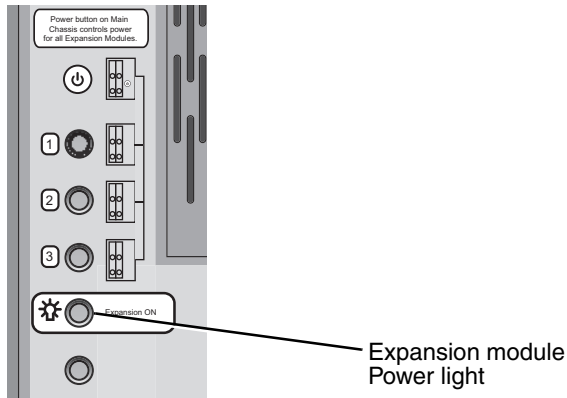
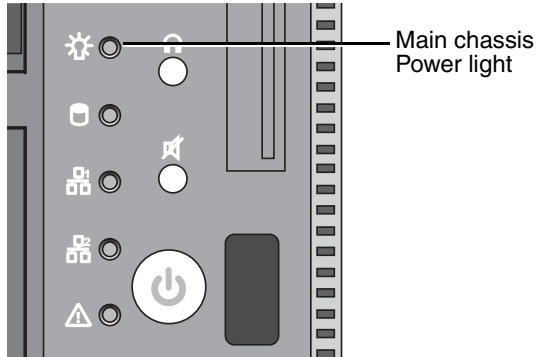
You are prompted to confirm the shutdown.

3. Click the **Shutdown** or **Reboot** button.



Click **Shutdown** or
Reboot

The Power lights at the front of the main chassis and any expansion modules turn off when shutdown is complete.



3

Maintenance

Cleaning the Enclosure

To clean the Infinity Expansion Module enclosure, log out, and shut down the system (refer to “Shutting Down and Rebooting” on page 2-24). When it is powered off, unplug the Infinity Expansion Module power cord.

Clean the enclosure with a clean soft cloth or towel **slightly** moistened with a mild soap and water solution. Allow the enclosure to completely dry before operating the Infinity Expansion Module again.



CAUTION Always power off the Infinity Expansion Module and disconnect its power cord before cleaning. Resume operation only after the surfaces are completely dry.

Replacement Procedures



CAUTION The Infinity system includes a robust user warning system to decrease the likelihood of permanent data loss. It is imperative that users act to prevent permanent data loss when the Infinity system indicates that there is a problem. Failure to do so may invalidate the system warranty and will jeopardize system data.

Replacing a Hard Drive

If a hard drive fails, it should be replaced immediately.



CAUTION Do not remove more than one hard drive at a time. This could cause permanent data loss. Failure to comply with this caution may void the Infinity Expansion Module warranty.



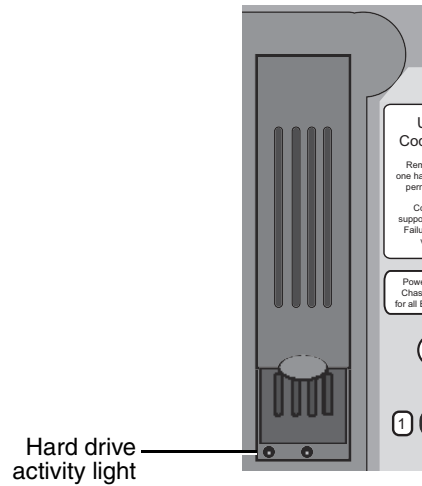
CAUTION To avoid data loss, make sure that you are replacing the failed drive. To identify the failed drive, the drive's status light will be red.



To replace a failed hard drive

1. Do not shut down the Infinity system.
2. Open the expansion module door.

3. Make sure that you properly identify the failed hard drive. Its activity light will be red.



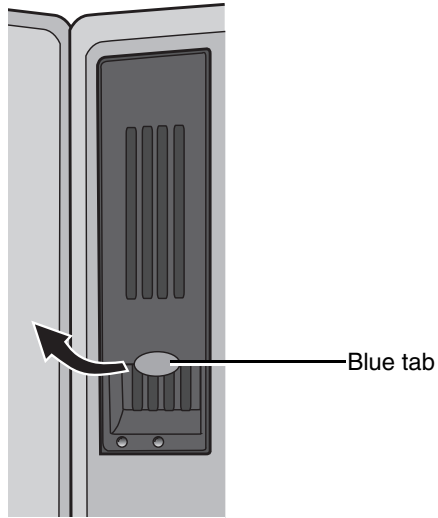
If you cannot find the hard drive with a red activity light, use the System Status user interface to locate the failed hard drive.



CAUTION If it is not apparent which hard drive has failed, DO NOT remove any hard drives. Removing the wrong drive may result in data loss. Contact Codonics Technical Support for assistance (+1 440-243-1198).

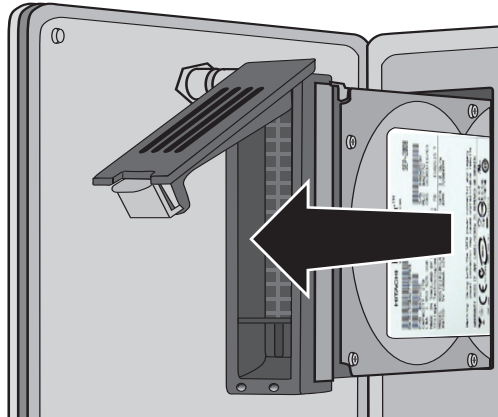
4. Open the failed hard drive's lever by pulling up on the blue tab to about 45°.

This disconnects the hard drive from the internal connector.



5. Wait 10 seconds for the hard drive to spin down.

6. Slide the failed hard drive out of the chassis.



7. Mark the word **FAILED** on the failed hard drive to prevent accidental reuse.



CAUTION Electronic patient health care information may still be accessible on failed hard drives. Dispose of failed hard drives in an appropriate manner to protect patient health care information.

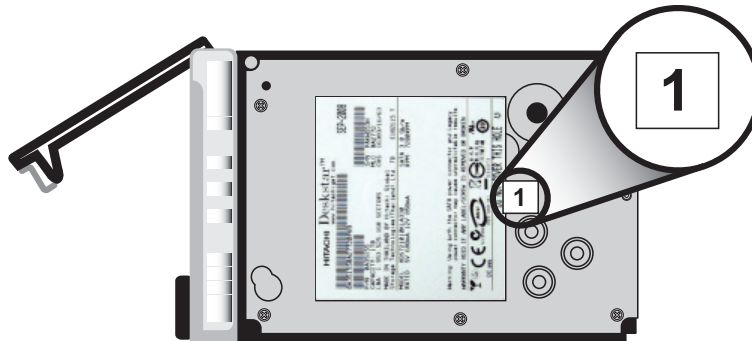
- The replacement hard drive is shipped in a protective anti-static bag. Open the anti-static bag and carefully remove the replacement hard drive.



CAUTION Use care when unpacking and handling hard drives. You should be properly grounded and observe anti-static procedures before removing the replacement hard drive from the anti-static bag. Do not drop the hard drive. Handle only the front, side edges, and face with the label. Do not handle the underside or the backplane of the drive. Do not touch any exposed electronics.

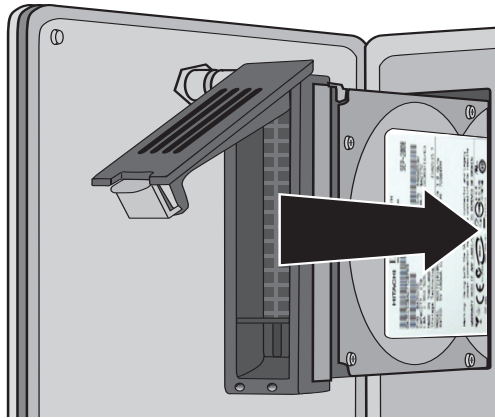


- Locate the drive number labels in the replacement hard drive kit. Peel off the number that corresponds to the failed hard drive and attach the label to the new hard drive.



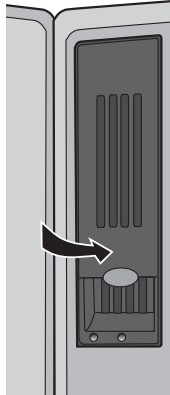
- Pull up on the blue tab to open the replacement drive lever to about 45°.

11. Slide the hard drive fully into its slot in the chassis.



CAUTION When installing the hard drive, it is important to install it all the way into its slot. Push the drive as far into the slot as it will go (it should be flush with the neighboring drives). There is some resistance when the back of the drive is seated in the cage. It is possible to latch the lever without having the drive fully installed.

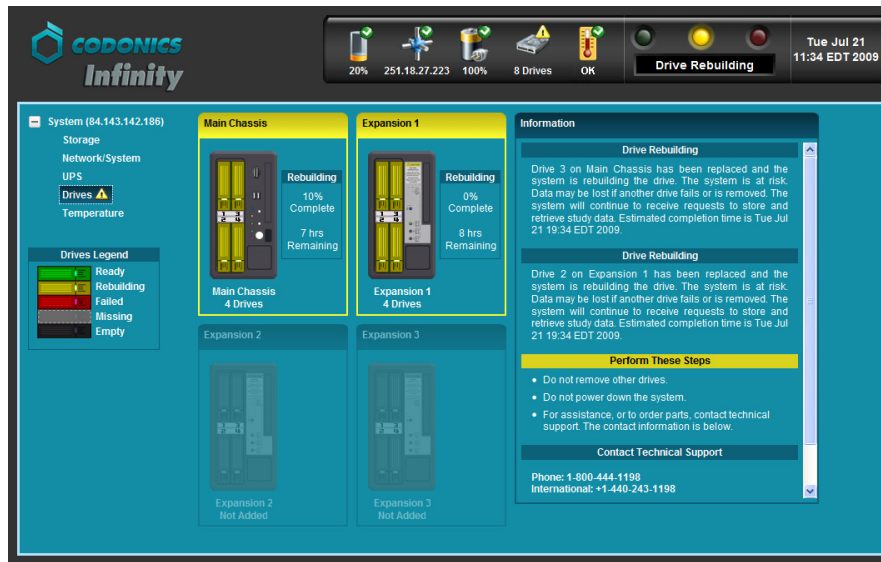
12. Close the hard drive lever to lock the drive in place. The lever will click into position when it is fully closed and locked.



NOTE: After installing a new hard drive, its status light might be red for about a minute. This is because it takes some time for the RAID controller to recognize the new drive.

The RAID controller will begin to rebuild the new hard drive. The Infinity system is fully functional during this process, which takes approximately 8 hours.

The System Status user interface will show the progress of the rebuild operation.



System performance will be slower during the rebuild operation. When the RAID rebuild is complete, the system will operate at normal performance levels.

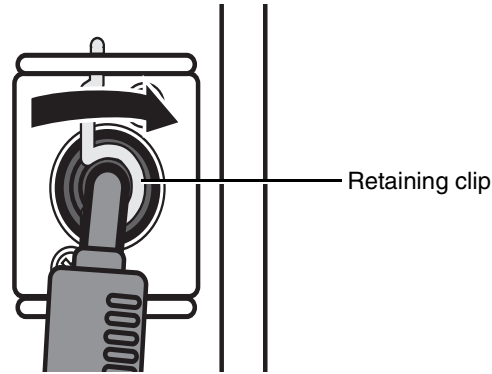
Replacing the AC Power Adapter



To replace the AC power adapter

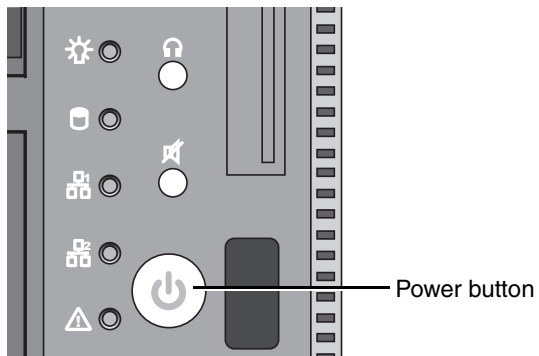
1. Shut down the Infinity system. Refer to “Shutting Down and Rebooting” on page 2-24.
2. Unplug the power adapter’s AC power cord from the power outlet or UPS.
3. Unplug the AC power cord from the old power adapter.

4. Release the retaining clip and disconnect the power adapter's connector from the power plug on the rear of the chassis.



5. Dispose of the old power adapter in accordance with local regulations.
6. Remove the new power adapter from its shipping material.
7. Connect the AC power cord to the new power adapter.
8. Connect the power cord to the power connector on the rear of the chassis.
9. Secure the power cord with the attached retaining clip.
10. Plug the AC power cord into the power outlet or UPS.

11. Momentarily press the Power button at the front of the **main chassis** to start up the Infinity system.



Replacing the Expansion Module Chassis



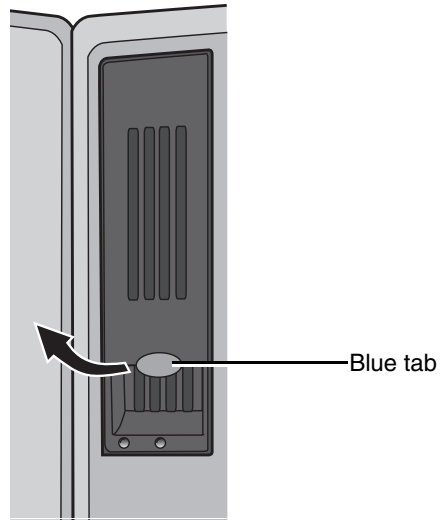
To replace the chassis

1. Unpack the Infinity Expansion Module replacement chassis.
2. Place the replacement chassis on a flat, solid surface near the original chassis.
3. Remove the tape securing the front cover.

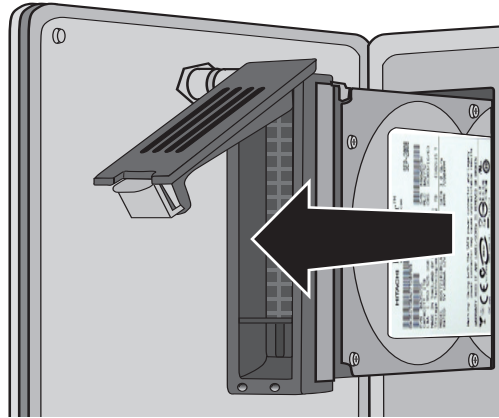
The interior of the replacement chassis has four empty hard drive slots. The hard drives and the AC power adapter will be transferred from the failed chassis.

4. Shut down the Infinity system. Refer to “Shutting Down and Rebooting” on page 2-24.
5. If there is a UPS, power it off.
6. Disconnect the chassis’ AC power cord from the power outlet or UPS.
7. Open the front door of the failed chassis.
8. For each hard drive in the old chassis:
 - a. Open the hard drive’s lever by pulling up on the blue tab to open the lever to about 45°.

This disconnects the hard drive from the internal connector.



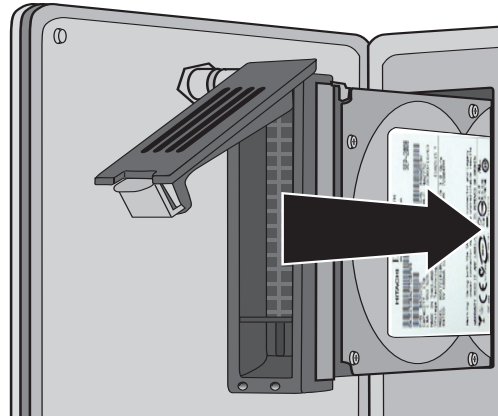
b. Slide the hard drive out of the old chassis.



CAUTION Use care when handling hard drives. Do not drop the hard drive. Handle only the front, side edges, and face with the label. Do not handle the underside or the backplane of the drive. Do not touch any exposed electronics.



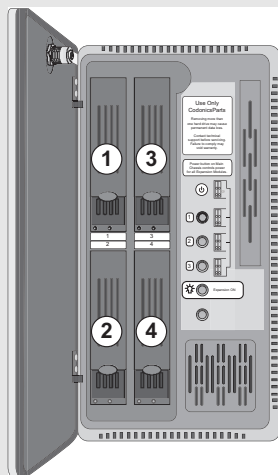
- c. Slide the hard drive fully into the corresponding slot in the replacement chassis.



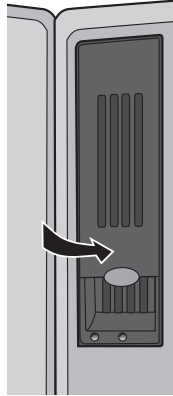
CAUTION When installing the hard drive, it is important to insert it all the way into its slot. Push the drive as far into the slot as it will go (it should be flush with the neighboring drives). There is some resistance when the back of the drive is seated in the cage. It is possible to latch the lever without having the drive fully installed. It is critical that all drives are properly installed prior to the initial system startup of the replacement chassis.



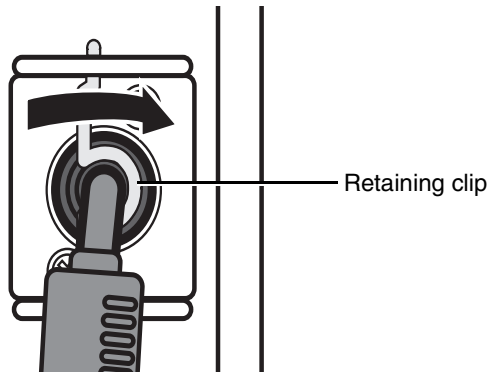
CAUTION Make sure that each hard drive is installed in the corresponding slot in the replacement chassis.



- d. Close the hard drive lever to lock the drive in place. The lever will click into position when it is fully closed and locked.

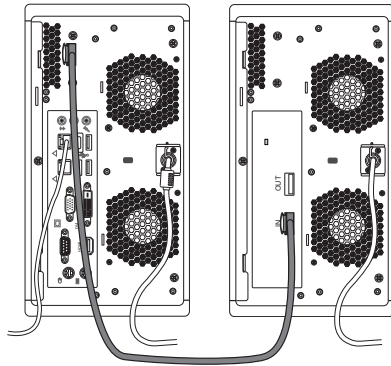


9. Release the retaining clip and disconnect the power adapter's connector from the power plug on the rear of the failed chassis.

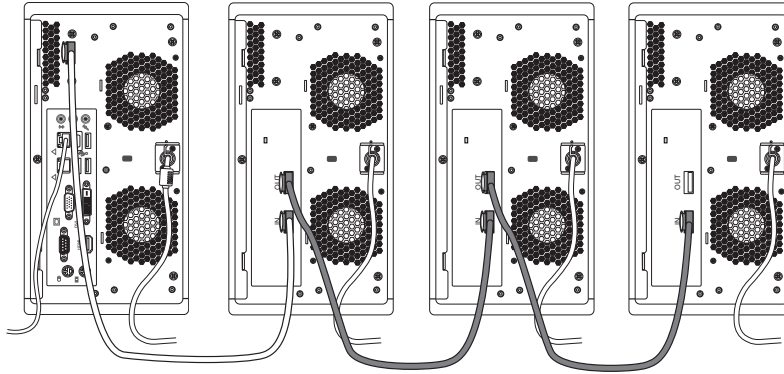


10. Connect the power cord to the power connector on the rear of the replacement chassis.
11. Secure the power cord with the retaining clip.
12. Disconnect the SAS cable(s) from the rear of the failed chassis and connect them to the corresponding SAS IN and SAS OUT connectors of the replacement chassis.

When connecting a SAS cable between the main chassis and the first expansion module in a chain, the cable connects to the main chassis' SAS connector and to the first expansion module's SAS IN connector, as shown in the following illustration.



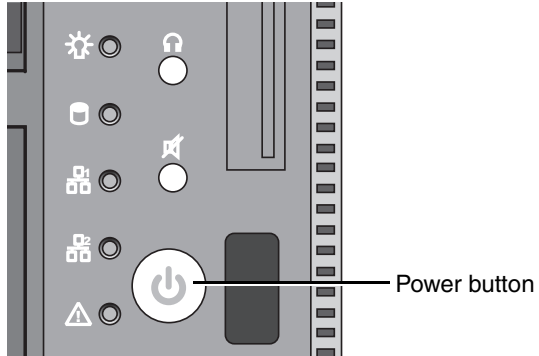
When connecting a SAS cable between expansion modules in the chain, the cable connects to the previous module's SAS OUT connector and the next module's SAS IN connector, as shown in the following illustration.



CAUTION Properly connect the SAS cables. Make sure that they are secure. Do not disconnect a SAS cable during system operation, as data could be lost.

13. Plug the chassis' AC power cord into the power outlet or UPS.

14. Momentarily press the Power button at the front of the Infinity **main chassis** to start up the system.



Ordering Parts

The following table lists the replacement parts that can be ordered from Codonics:

Supplies	Catalog Number
Infinity hard drive (1 TB)	SP00447
Infinity power adapter	SP00449
Infinity Expansion Module replacement chassis	SP00495

To order parts in the U.S.A., contact Codonics Customer Service at:

Phone: 440-243-1198
Fax: 440-243-1334
Toll Free: 800-444-1198
Web: www.codonics.com

To order parts outside of the U.S.A., contact your Codonics representative.

Preparing for Shipping

If you have to ship the Infinity Expansion Module for any reason (for example, to return it to Codonics for service), you must use the original box and packing materials. If you do not have the original box and packing materials, contact your Codonics representative for instructions on how to return it.

4

Status Indicators and Troubleshooting

This chapter covers status indicators and troubleshooting for the Infinity Expansion Module.

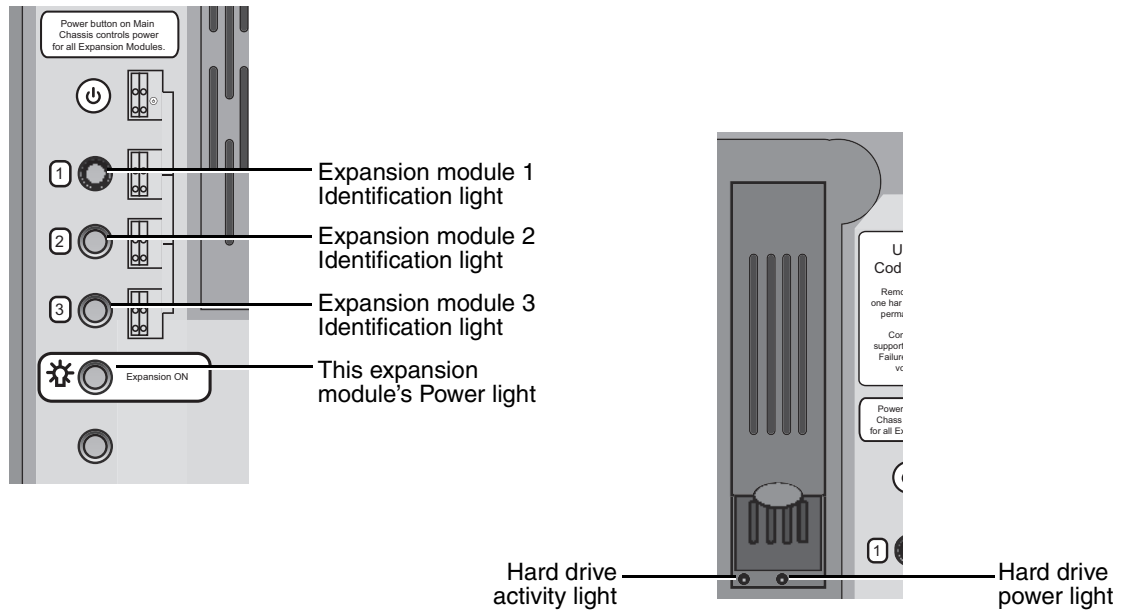
For a complete description of the Infinity main chassis status indicators and general system troubleshooting, refer to the Infinity User's Manual.



CAUTION The Infinity system includes a robust user warning system to decrease the likelihood of permanent data loss. It is imperative that users act to prevent permanent data loss when the Infinity system indicates that there is a problem. Failure to do so may invalidate the system warranty and will jeopardize system data.

Front Panel Status Lights

LED status lights are located on the expansion module front panel.



The following table explains how to interpret the state of the front panel status lights.

Table 4-1. Front Panel Status Light Indications

Status Light	Indications
Expansion power	Blue: Power on.
Expansion module identification	Identification of each expansion module. Green: On.
Hard drive power	Blue: Power on.
Hard drive activity	Off: No disk activity. Green: Disk activity. Red: Hard drive fault.

System Status User Interface

Detailed status information about the Infinity system is available in the System Status user interface.

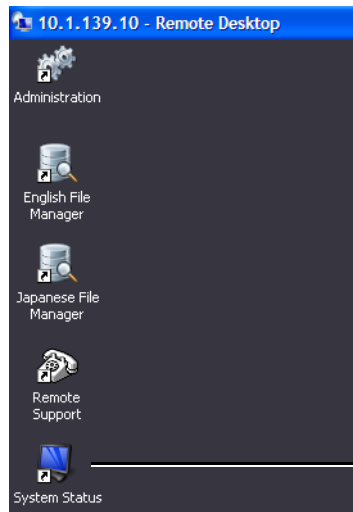


To view status information using the System Status user interface

From a web browser running on a PC on the same network as the Infinity system, enter the Infinity IP address or host name as the URL address.

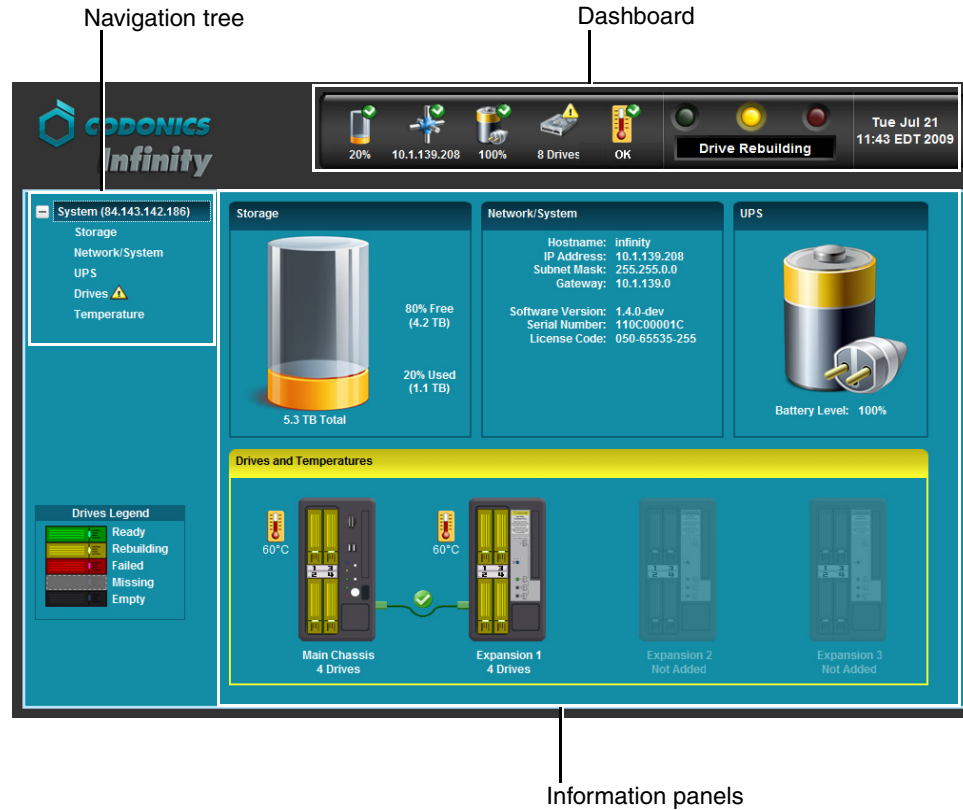
OR

If connected to the Infinity system by a Remote Desktop Connection or a local monitor, keyboard, and mouse, locate and open the System Status user interface icon on the Infinity desktop.



System Status user interface icon

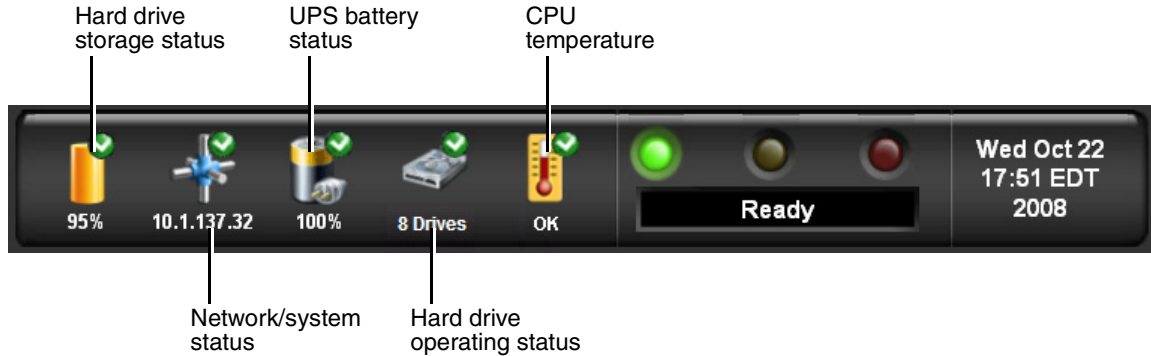
The System Status user interface's main screen displays. The following figure identifies the major areas of the tool. The following topics provide information about using each of these areas.



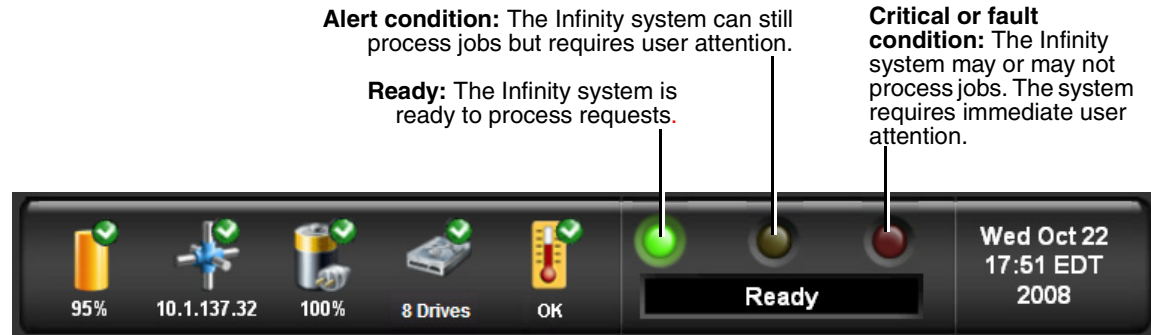
Status Indicators

The Dashboard and navigation tree include the following status indicators:

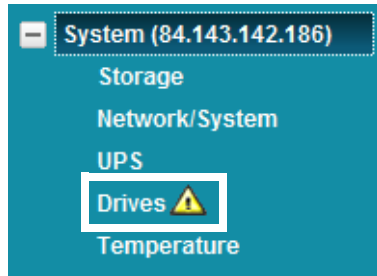
- **Status icons.** Icons that provide basic information about the Infinity system's operating state.



- **LED status indicators.** The three LED-style lights indicate the overall status of the Infinity system.



- **Navigation tree icons.** Icons that provide basic information about Infinity's operating state.



The following tables explain how to interpret the state of the status and navigation tree icons and of the LED indicators.

Table 4-2. Status and Navigation Tree Icons



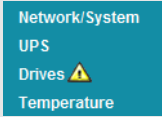
Status Icon	Description
	<p>A green checkmark in a status icon indicates a normal operating condition.</p>
 	<p>A yellow triangle in a status icon and next to a navigation tree entry indicates an alert condition. An alert condition occurs when the Infinity main chassis or any expansion module requires user attention but can still process storage and retrieval requests. The specific alert condition is displayed in the Dashboard status message area and in the information panel area.</p> <p>Examples include the CPU temperature of the main chassis exceeding the alert threshold, a hard drive being rebuilt, or storage space is nearly full.</p>

Table 4-2. Status and Navigation Tree Icons





Status Icon	Description
	<p>The combination of a red cross in a status icon and a red cross flashing next to a navigation tree entry indicates a critical condition. A critical condition occurs when the Infinity main chassis or any expansion module is at risk of entering a fault condition. The specific critical condition is displayed in the Dashboard status message area and in the information panel area.</p>
	<p>An example is one hard drive in a RAID array has failed.</p>
	<p>The combination of a red cross in a status icon and a steady red cross next to a navigation tree entry indicates a fault condition. A fault condition occurs when the Infinity main chassis or any expansion module requires immediate attention due to hardware failure and/or cannot process storage and retrieval requests. The specific fault condition is displayed in the Dashboard status message area and in the information panel area.</p>
	<p>Examples are two hard drive failures in the RAID array or no network connection.</p>

Table 4-3. LED Status Indicators

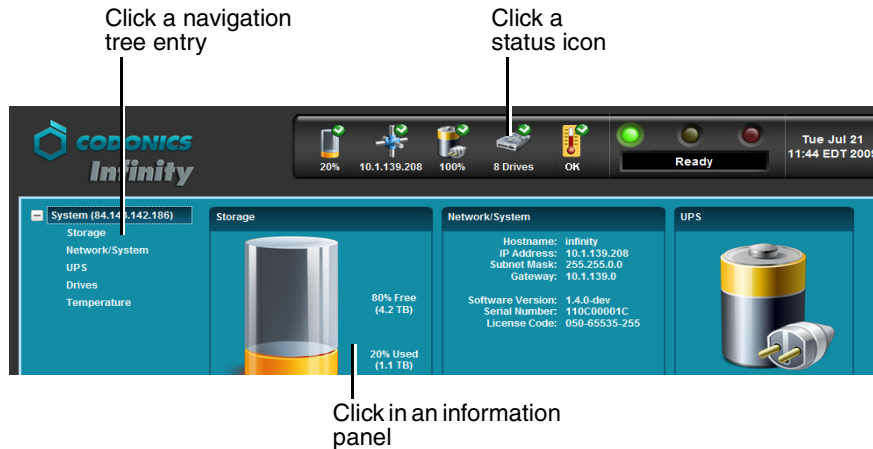
Status Icon	Description
Green: On	<p>Ready condition.</p> <p>The ready condition indicates that the Infinity system is properly configured and can process storage and retrieval requests. The message “Ready” also displays in the Dashboard status message area.</p>
Yellow: On	<p>Alert condition.</p> <p>An alert condition occurs when the Infinity system requires user attention but can still process storage and retrieval requests. The specific alert condition is displayed in the Dashboard status message area and in the information panel area.</p>

Table 4-3. LED Status Indicators (Continued)

Status Icon	Description
Red: On	<p>Critical or fault condition.</p> <p>A critical condition occurs when the Infinity system is at risk of entering a fault condition.</p> <p>A fault condition occurs when the Infinity system requires immediate attention due to hardware failure and/or cannot process storage and retrieval requests.</p> <p>The specific critical or fault condition is displayed in the Dashboard status message area and in the information panel area.</p>

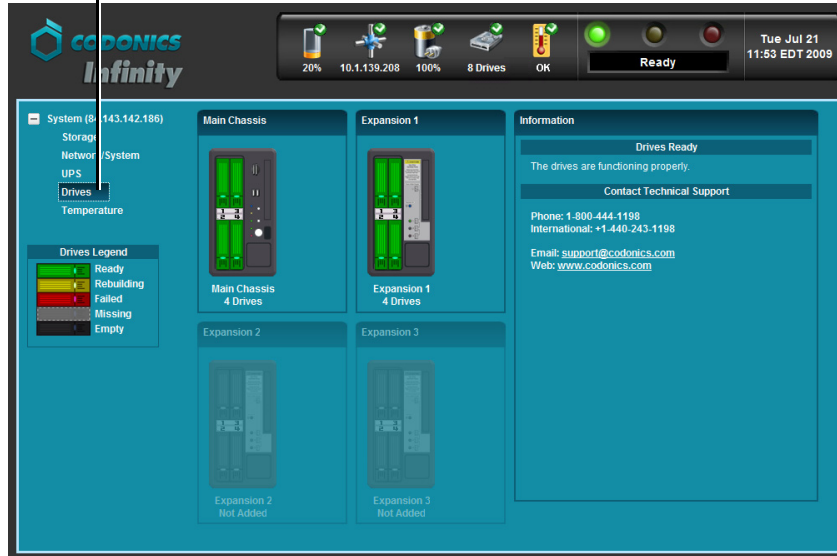
Navigating Detailed Status Information

To view detailed status information, click on an entry in the navigation tree, on one of the status icons in the Dashboard, or in an information panel.



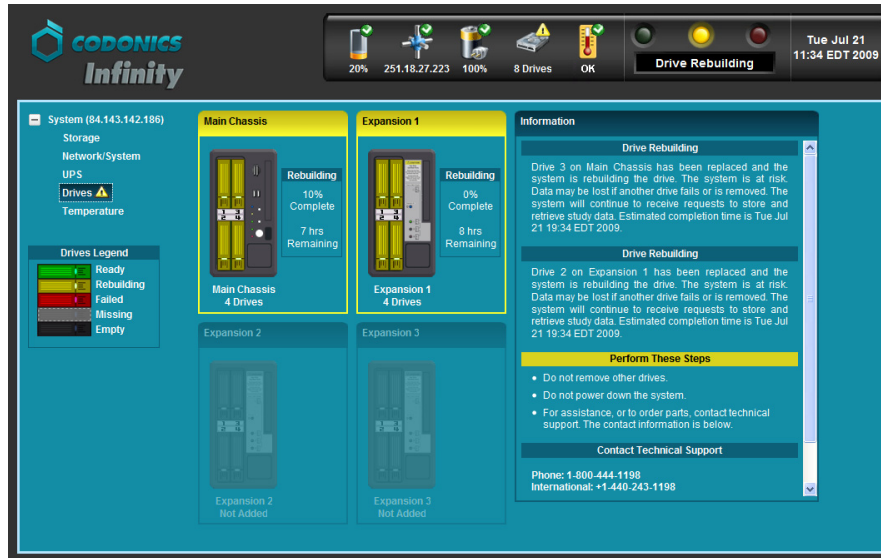
The following sample screen shows the Drives information selected.

Drives status information selected and displayed in the information panels



Detailed Status in Information Panels

Detailed information is displayed in the information panels.



Note that, when in an alert, critical, or fault state, the panel border color indicates the status of the related area: yellow for alert and red for critical or fault.

When the **Drives** navigation tree entry is selected, a **Drives Legend** displays in the navigation panel. The legend describes what drive states are indicated by the drive slot colors.

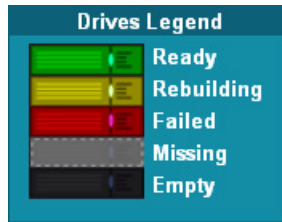


Table 4-4 describes the drive states listed in the **Drives Legend**.

Table 4-4. RAID Operating Modes

Drive State	Description	Action Required
Ready	The drive is operating normally.	No user action is required.
Rebuilding	The system is rebuilding information on the drive. The rebuild operation can take up to 12 hours.	No user action is required specific to this drive. If the drive is replacing a failed drive, the cause of the failed drive may need to be investigated.
Failed	The drive has failed.	The failed drive must be replaced immediately. For complete replacement instructions, refer to "Replacing a Hard Drive" on page 3-2.
Missing	The slot contained an installed drive that was in use, but is now missing.	Insert the missing drive or another working drive immediately. For complete replacement instructions, refer to "Replacing a Hard Drive" on page 3-2.
Empty	The slot is not being used.	No user action is required.

Troubleshooting Common Problems

The following table lists common problems, their possible causes, and how to solve them.

Table 4-5. Troubleshooting

Problem	Possible Causes	Solutions
<i>General System</i>		
The AC power adapter failed.	The AC power adapter failed.	Replace the AC power adapter; refer to “Replacing the AC Power Adapter” on page 3-10.
The expansion module startup fails.	The main chassis is not powered on.	Verify that the main chassis is powered on.
	The expansion module does not have power.	Verify that the AC power adapter is connected at the rear panel of the expansion module. Verify that the AC power cable is connected to the power adapter, and that the power adapter is connected to an AC outlet or the UPS. Verify that the AC power adapter LED is on.
	The SAS cable is not connected.	Verify that the SAS cable is connected to both the expansion module and either the main chassis or another expansion module.

Table 4-5. Troubleshooting (Continued)

Problem	Possible Causes	Solutions
The expansion module shuts down unexpectedly.	Power was removed from the main chassis.	Verify that the main chassis is powered on.
	The expansion module does not have power.	Verify that the AC power adapter is connected at the rear panel of the expansion module. Verify that the AC power cable is connected to the power adapter, and that the power adapter is connected to an AC outlet or the UPS. Verify that the AC power adapter LED is on.
	The SAS cable is not connected.	Verify that the SAS cable is connected to both the expansion module and either the main chassis or another expansion module.
The main chassis does not recognize the expansion module.	The SAS cable is not connected.	Verify that the SAS cable is connected to both the expansion module and main chassis.
	The Expansion Module feature key has not been added.	Verify that the correct key for the expansion module was added in the Configurator tool; refer to “Adding the Expansion Feature Key” on page 2-8.
The network is not responding.	The network settings are not configured properly.	Refer to the Infinity User’s Manual.
	The network cable is not connected.	
	The SmartDrive has been removed.	

Table 4-5. Troubleshooting (Continued)

Problem	Possible Causes	Solutions
Login fails.	The wrong user name or password was entered.	Refer to the Infinity User's Manual.
The System Status user interface indicates that one or more expansion modules are missing.	The SAS cable is not connected.	Verify that all expansion modules are present, and that the SAS cables are properly connected between the main chassis and expansion modules in the chain.
	The expansion module(s) are not powered on.	Verify that the expansion module(s) are powered on.
A hard drive in the expansion module array is in a fault state (the hard drive activity light is red).	The drive has either failed or is not installed properly.	Replace or reinstall the failed hard drive; refer to "Replacing a Hard Drive" on page 3-2. CAUTION: Do not remove any other hard drives from the expansion module or shut down the system until the failed/faulted hard drive has been replaced or reinstalled, and fully rebuilt. Remove only one hard drive per module at a time.
The expansion module's entire RAID array is in a fault state (all hard drive activity lights are red).	Multiple hard drives in the array have failed or are missing, or data corruption in the array has occurred.	Stop sending studies to the Infinity system, and contact Codonics Technical Support (+1 440-243-1198).
The Infinity system indicates that the RAID battery needs to be replaced.	The RAID battery has exceeded its rated lifespan. If a power outage occurs, data on the RAID array could become corrupted.	The RAID battery needs to be replaced. Contact Codonics Technical Support (+1 440-243-1198).

A

Hazardous Material Information

Materials of Construction

The Infinity Expansion Module unit is RoHS compliant.

Codonics has set very stringent standards for evaluating products to ensure the marketing of regulatory compliant products worldwide.

We do not intentionally add, nor are we aware, that the products or packaging contain the following materials:

- Bioavailable arsenic (small amounts of arsenic used in glass, LEDs, and semiconductors are not considered to be bioavailable).
- Bioavailable crystalline silica (small amounts of crystalline silica are used in certain paints, coatings, and filler materials).
- Polychlorinated biphenyls (PCBs).
- Asbestos.
- Organic tin (not used in tin lead solder applications).

- Ozone-depleting substances such as chlorofluorocarbons, methyl chloroform, and carbon tetrachloride.

Matériaux de Construction

L'appareil Infinity est conforme à la norme RoHS et par conséquent ne contient aucun des composants suivants:

Afin d'obtenir les certificats de conformité de ses produits dans le monde entier, Codonics utilise les standards d'évaluation les plus contraignants pour tester ses produits.

Codonics assure notamment n'avoir ajouté ou avoir été informé que soit ajouté les composants suivants dans son produit et son emballage:

- *Arsenic (en faible quantité sont présents dans le verre, les LEDs et les semi-conducteurs sans portée atteinte à l'organisme).*
- *Cristaux de silicium.*
- *Biphenyls polychlorés.*
- *Amiante.*
- *Matières organiques.*
- *Substances portant atteinte à la couche d'ozone tels que des carbones chlorofluorés du chloroforme et des tétrachlorures de carbone.*

Manufacturing

During manufacturing operations that produce Codonics products (including packaging), no ozone depleting substances (such as chlorofluorocarbons, methyl chloroform, and carbon tetrachloride) are used.

Fabrication

Aucun composant susceptible de détruire la couche d'ozone ne sont utilisés lors de la fabrication (emballage inclus) des produits Codonics.

B

Specifications

Specifications (English)

Storage:	3 TB per each expansion module, using SATA II 3.5-in. hard drives for data
Performance:	25+ MB/sec (DICOM Store)
Redundancy:	RAID 5 for study data
Power:	100 – 240 Vac auto-switching, 50/60 Hz, 68 VA (rated Power)
Temperature:	Operating: 15 – 30°C (59 – 86°F) Storage: -22.2 – 51°C (-8 – 123.8°F)
Humidity:	Operating: 20% – 80% noncondensing Storage: 85% maximum, noncondensing
Dimensions:	Height: 10.2 in. (26 cm) Width: 5.5 in. (14 cm) Depth: 10.2 in. (26 cm)
Weight:	19 lbs (8.6 kg) per each expansion module
Medical Compliance:	FDA cleared to market (Class 1 device)
Regulatory:	Full medical device compliance including FDA and MDD CE Class I, GMP/QSR ISO 13485-2003, and 60601-1 Safety and EMC/EMI for Healthcare Facilities
Classification:	Class 1 equipment, type ordinary IPX0, continuous with intermittent loading

Spécifications (Français)

<i>Stockage</i>	<i>3 TB, en utilisant des disques durs SATA II 3.5-in.</i>
<i>Performance:</i>	<i>25+ MB/sec (DICOM Store)</i>
<i>Redondance:</i>	<i>RAID 5 for study data</i>
<i>Alimentation</i>	<i>100 – 240 Vac auto-commutation, 50/60 Hz, 68 VA (puissance nominale)</i>
<i>Temperature</i>	<i>Opération : 15 – 30°C (59 – 86°F) Stockage : -22.2 – 51°C (-8 – 123.8°F)</i>
<i>Humidité</i>	<i>Opération : 20% – 80% sans condensation Stockage : 85% maximum, sans condensation</i>
<i>Dimensions</i>	<i>Hauteur: 26 cm Largeur: 14 cm Profondeur: 26 cm</i>
<i>Poids</i>	<i>8.6 kg</i>
<i>Certification Médicale:</i>	<i>Autorisation de commercialisation de la FDA (Appareil de classe 1)</i>
<i>Conformite:</i>	<i>Appareil medical conforme aux normes FDA and MDD CE Class I, GMP/QSR ISO 13485-2003, and 60601-1 Safety and EMC/EMI pour les societes medicales</i>
<i>Classification:</i>	<i>Appareil de Classe I, type IPXO ordinaire, continu avec chargement intermittent</i>

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