CODONICS

Disinfection Technology™

User's Manual

April 16, 2015
Version 1.3.0

Codonics, Inc.
17991 Englewood Drive
Middleburg Heights, Ohio 44130 USA
440.243.1198 Phone
440-243-1334 Fax
Email info@codonics.com
www.codonics.com

Part Number 905-076-102.

Codonics Disinfection Technology (CDT) manufactured by Daylight Medical, Inc. for Codonics, Inc.

European Authorized Representative for Daylight Medical, Inc:

EC REP

CEPartner4U
Esdoornlaan 13,
3951DB Maarn
The Netherlands
Tel.: +31 6.516.536.26

Preface

Conventions Used in This Manual

Bulleted Lists

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

> Codonics Disinfection Technology (CDT) is shipped in cartons that contain the following system components:
>
> - Codonics Disinfection Technology Unit
> - Power Cord
> - Cartridge (in separate internal carton)

Numbered Steps

Numbered items indicate steps that are to be followed in a procedure. For example:

1. Toggle the **Power Switch** to the "|" position on the **Rear Panel** of the CDT unit to power on and start up the system.

2. For the initial 5 seconds of power up, there is no Front Panel LED illumination. Once 5 seconds is reached, the System light begins to flash green and system activation is audible.

3. After the 30 second system warm up process has been completed, the **System** light on the **Front Panel** will be illuminated in solid green. Additionally, the UVC bulbs will warm up and the Cartridge LED will be illuminated in green. With those indications, the CDT unit is available for utilization.

Notes

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

NOTE: If there is no system utilization for a period of 60 minutes, the system will start a stand-by mode.

Cautions and Warnings

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

 PRECAUTION: Never insert any object not indicated for use with the CDT. See intended use under Indications for Use section.

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

 WARNING: Do not place your hands inside the openings of the CDT before turning off the power.

Important Information

Bold type is used for emphasis. For example:

The **System LED** indicates the state of the CDT unit.

Purpose and Scope

Refer to this User's Manual for procedures on how to perform the Codonics Disinfection Technology operations, including:

- Unpacking the hardware
- Setting up the hardware and software
- Performing device disinfection
- Utilizing device sleeves for disinfection
- Maintaining the system and replacing the cartridge
- Monitoring the system and troubleshooting common problems

Product Information

For technical assistance with the Codonics Disinfection Technology, call Codonics Technical Support at the following number:

Phone:	+1.440.243.1198
Toll Free:	800.444.1198 (USA only)

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

Email:	support@codonics.com
Web Site:	www.codonics.com

General product information can also be requested by sending an email to:

Email:	info@codonics.com

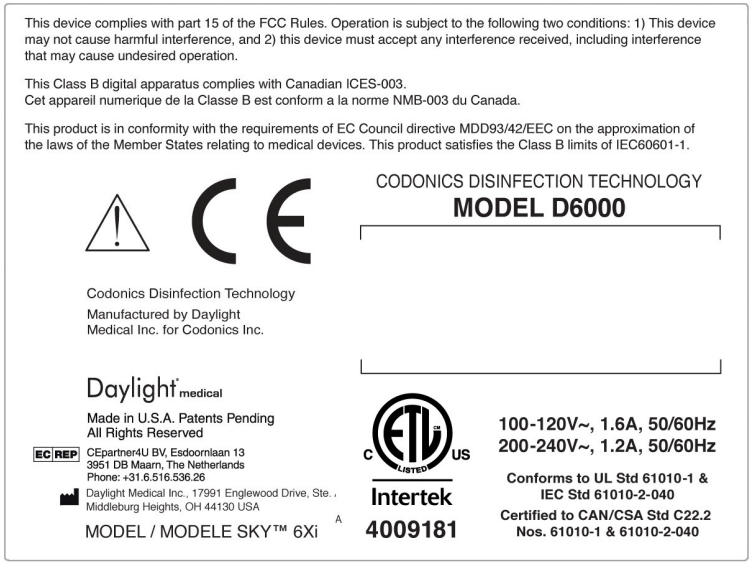
Please include your postal mailing address and telephone number in the email message. Basic product information is returned via email unless otherwise requested.

Warnings, Precautions and Limitations for Use

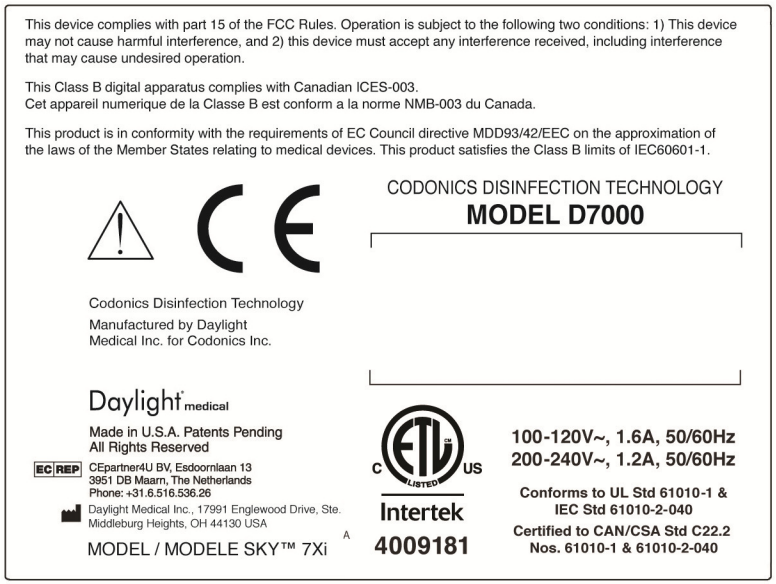
Location of Safety and Compliance Labels

Codonics Disinfection Technology manufactured by Daylight Medical, Inc. for Codonics, Inc.

Daylight Medical, Inc. is in compliance with various regulations, details of which are listed in the *Specifications* section. The CDT safety and compliance labels, shown below, are located on the rear panel (D6000) or back panel (D7000) of the device.



CDT D6000 safety and compliance label



CDT D7000 safety and compliance label

Warnings and Precautions


The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance instructions in the literature accompanying the device.

 The lightning flash with the arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated “dangerous voltage” within the device’s enclosure that may be of sufficient magnitude to constitute a risk of electrical shock.

 The thermometer, within the equilateral triangle, is intended to alert the user to presence of internal components that may reach high temperatures within the device’s enclosure that may be of sufficient temperature to cause a burn.

Warnings and precautions may be found throughout this manual when specific operations are listed.

Mises en garde et précautions

 Le point d'exclamation dans un triangle équilatéral est destiné à alerter l'utilisateur de la présence d'instructions importantes de fonctionnement et d'entretien dans la documentation accompagnant l'appareil.

 L'éclair avec le symbole de flèche dans un triangle équilatéral est destiné à alerter l'utilisateur de la présence d'une "tension dangereuse" dans le boîtier de l'appareil qui peut être d'une ampleur suffisante pour constituer un risque de choc électrique.

 Le thermomètre, dans le triangle équilatéral, est destiné à alerter l'utilisateur de la présence de composants internes pouvant atteindre des températures élevées à l'intérieur de l'enceinte de l'appareil qui peuvent être suffisantes pour provoquer une brûlure.

Mises en garde et précautions peuvent être trouvées dans ce manuel lorsque des opérations spécifiques sont répertoriées.

Post-Disinfection Warnings

 WARNING: The Codonics Disinfection Technology is intended to disinfect non-critical medical devices. The subsequent utilization of the non-critical medical devices disinfected by the CDT is the sole responsibility of the user.

Avertissements post-désinfection

 AVERTISSEMENT: La technologie de désinfection de CDT est destinée à désinfecter les dispositifs médicaux non critiques. L'utilisation ultérieure des dispositifs médicaux non critiques désinfectés par CDT est de la seule responsabilité de l'utilisateur.

Ultraviolet Light Bulb Warnings and Precautions

 WARNING: Never look directly through the input and output openings of the CDT.

 WARNING: Ultraviolet bulbs contain mercury and therefore must be properly disposed of as a hazardous waste in accordance with local, state, and federal regulations or the lamps should be recycled.

 WARNING: Take precaution with broken UV bulbs to avoid inhalation, ingestion, or contact with skin or eye. See Chapter 4 for information about *Procedures for Disposal of Bulbs* and *Special Handling Information for Broken Bulbs*.

Mises en garde et précautions concernant les lampes UV

 AVERTISSEMENT: Ne jamais regarder directement à travers les ouvertures de l'appareil CDT.

 AVERTISSEMENT: les lampes UV contiennent du mercure et doivent donc être correctement éliminées comme des déchets dangereux conformément aux réglementations locales, provinciales et nationales ou les lampes doivent être recyclées.

 AVERTISSEMENT: Prenez des précautions avec les ampoules UV cassées pour éviter l'inhalation, l'ingestion ou le contact avec la peau ou les yeux. Voir le Chapitre 4 pour des informations sur les *Procédures d'élimination des ampoules* et les *Consignes particulières de traitement pour les ampoules cassées*.

Safety Warnings and Precautions

 WARNING: Do not place your hands inside the openings of the CDT before turning off the power to avoid exposing skin to UVC. Prolonged skin exposure may generate redness and an uncomfortable sunburn sensation.

 WARNING: The CDT should not be operated by children.

 WARNING: High Temperature – Internal components of CDT may develop temperatures above 110°F.

 WARNING: All assembly, adjustment, modification, maintenance and/or repair should be performed by qualified personnel authorized by Codonics.

 WARNING: Only CDT-approved replacement parts should be used when maintaining the device.

 WARNING: Do not remove any warnings, cautions, or descriptive labeling from the CDT.

 WARNING: Take care when closing the front panel to avoid finger pinching.

 PRECAUTION: The product must be used in accordance with this User's Guide.

 PRECAUTION: Avoid spilling fluids on any part of the CDT.

 PRECAUTION: If spills do occur, immediately disconnect the CDT from the power source and contact Codonics Technical Support for guidance in cleaning the CDT.

 PRECAUTION: Never insert any object not indicated for use with the CDT. See intended use under Indications for Use section.

 PRECAUTION: Do not use any attachments not recommended by Codonics.

Conseils de sécurité

 AVERTISSEMENT: Ne placez pas vos mains à l'intérieur des ouvertures de CDT avant la mise hors tension pour éviter d'exposer la peau aux UVC. Une exposition prolongée de la peau peut générer des rougeurs et une sensation de coup de soleil inconfortable.

 AVERTISSEMENT: CDT ne doit pas être manipulé par des enfants.

 AVERTISSEMENT: Haute Température – certains composants internes de CDT peuvent générer des températures supérieures à 45°C.

 AVERTISSEMENT: Tout montage, réglage, modification, entretien et/ou réparation doivent être effectués par du personnel qualifié et autorisé par Codonics.

 AVERTISSEMENT: Seules les pièces de rechange approuvées par Codonics peuvent être utilisées lors de la maintenance de l'appareil.

 AVERTISSEMENT: Ne pas retirer les avertissements, mises en garde et étiquetages descriptifs situés sur CDT.

 AVERTISSEMENT: Faites attention lors de la fermeture du panneau avant afin d'éviter tout pincement des doigts.

 PRÉCAUTION: Le produit doit être utilisé conformément au Guide de l'utilisateur.

 PRÉCAUTION: Évitez de renverser des liquides sur n'importe quelle partie de CDT.

 PRÉCAUTION: Si des projections se produisent, débranchez immédiatement CDT de la source d'alimentation et contactez le Codonics support technique pour les guider dans le nettoyage de la CDT.

 PRÉCAUTION: Ne jamais insérer un objet non-indiqué pour une utilisation avec CDT.

 PRÉCAUTION: Ne pas utiliser d'accessoires non recommandés par Codonics. Voir utilisation prévue en vertu des indications rubrique Mode d'emploi.

Voltage Warnings and Precautions

 WARNING: This device must be electrically grounded.

 WARNING: To prevent fire or shock hazard, do not expose this device to rain or moisture.

 WARNING: Explosion Hazard – Do not operate the CDT in the presence of flammable vapors.

 WARNING: Disconnect the power cord from the wall outlet before servicing to avoid the possibility of electric shock.

 WARNING: Turn the system off before opening the front panel to avoid the possibility of electric shock.

 WARNING: The CDT must be connected to a grounded electrical outlet to maintain grounding reliability.

 WARNING: Always power off the system before cleaning. An electrical shock could occur if the system is powered on and liquid is spilled into it.

 WARNING: 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 and effectiveness.

 WARNING: Failure to insert the **Voltage Selector Plug** in the proper voltage orientation will cause the fuses in the **Voltage Selector Plug** to blow and will require the user to replace the fuses to restore operation. Fuses are not covered under warranty.

 PRECAUTION: Never operate the CDT if it has a damaged power cord, power supply or plug. If the power cord, power supply or plug is worn or damaged, contact Codonics at +1.440.243.1198.

 PRECAUTION: The electrical installation of the room in which the CDT will be operated must comply with the local electrical wiring standards.

Mises en garde et précautions concernant la tension

 AVERTISSEMENT: Cet appareil doit être relié électriquement à la terre.

 AVERTISSEMENT: Pour éviter un incendie ou un choc électrique, n'exposez pas cet appareil à la pluie ou à l'humidité.

 AVERTISSEMENT: Risque d'explosion - Ne pas faire fonctionner CDT en présence de vapeurs inflammables.

 AVERTISSEMENT: Débranchez le cordon d'alimentation de la prise murale avant de réparer CDT afin d'éviter tout risque de choc électrique.

 AVERTISSEMENT: Éteignez le système avant d'ouvrir le panneau avant afin d’éviter tout risque de choc électrique.

 AVERTISSEMENT: CDT doit être connecté à une prise de terre électrique afin de maintenir la fiabilité électrique.

 AVERTISSEMENT: Toujours éteindre le système avant de le nettoyer. Si le système est sous-tension lorsque du liquide est renversé à l’intérieur, un choc électrique peut se produire.

 AVERTISSEMENT: L'équipement ne doit pas être considéré comme composant d'un respirateur artificiel. Les respirateurs artificiels sont des dispositifs ou des systèmes destinés à maintenir la vie, et dont le mauvais fonctionnement peut conduire à une blessure sévère, voire à la mort, d’une personne. Un composant essentiel est un composant provenant d’un respirateur artificiel dont le mauvais fonctionnement peut provoquer la panne du respirateur artificiel, ou porter atteinte à sa sécurité et à son efficacité.

 AVERTISSEMENT: Brancher le sélecteur de tension dans le mauvais sens de tension provoque l’explosion des fusibles dans le sélecteur de tension. L'utilisateur devra alors remplacer les fusibles avant de rétablir le fonctionnement. Les fusibles ne sont pas couverts par la garantie.

 PRÉCAUTION: Ne faites jamais fonctionner CDT lorsque l’alimentation, le cordon d'alimentation et/ou la prise sont endommagés. Si le cordon d’alimentation, l'alimentation ou la prise sont usés ou endommagés, contactez Codonics. au +1.440.243.1198.

 PRÉCAUTION: L'installation électrique de la pièce dans laquelle CDT sera utilisé doit être conforme aux normes locales de câblage électrique.

Location Warnings and Precautions

 PRECAUTION: When removing the CDT, hold under the front and rear of the system. Do not lift the system by the foam packaging.

 PRECAUTION: The CDT weighs 35 to 44 lbs. (15 to 19 kg). To avoid injury, use two people to unpack and position the device.

 PRECAUTION: Placement of the CDT on a cart or stand must have at least 4 inches separation between the CDT back panel and the wall behind it.

 PRECAUTION: Do not place any objects over 40 lbs. (18.18 kg) on the top lid of the Double-Pass model. See Chapter 3 for information about *Double-Pass Processing Technique Model.*

 PRECAUTION: Keep the CDT away from heated surfaces.

Mises en garde et précautions concernant la mise en place de l'appareil

 PRÉCAUTION: Lors du retrait de CDT de son emballage, tenir sous l'avant et à l'arrière du système. Ne soulevez pas le système par l'emballage en mousse.

 PRÉCAUTION: CDT pèse 15 to 19 kg (35 to 44 lbs). Afin d'éviter toute blessure, deux personnes sont nécessaires pour déballer et installer l'appareil.

 PRÉCAUTION: Lorsque CDT est placé sur un chariot ou un support, prévoir un espace de séparation d'au moins 15 cm entre le panneau arrière de CDT et le mur.

 PRÉCAUTION: Ne pas poser d'objet de plus de 18,00 kg (40 lbs) sur le dessus du modèle Double-Pass. Consultez le Chapitre 3 pour plus d'informations.

 PRÉCAUTION: Tenez CDT éloigné des surfaces chauffées.

Cleaning Precautions

 PRECAUTION: Refer to the *Cleaning the Enclosure* section for recommended cleaning of the CDT.

 PRECAUTION: Apply the cleaner to a clean, lint-free cloth first and then clean the device. Liquid applied directly to the device could possibly leak inside and cause damage. Use extra caution when cleaning around the front panel display.

 PRECAUTION: Allow the device to completely dry before operating again.

 PRECAUTION: Never use abrasive materials.

 PRECAUTION: Never use any disinfecting agents that corrode.

 PRECAUTION: Always dilute cleaning agents according to the manufacturer's instructions, or use the lowest possible concentration.

 PRECAUTION: Do not allow the cleaning agent to remain on the device surface. Wipe off immediately with a lint-free cloth moistened with water. Failure to do so may result in discoloration of the surface.

 WARNING: Codonics makes no claims regarding the efficacy of the listed chemicals or methods as a means of controlling infection. Consult your hospital's infection control officer or epidemiologist.

Précautions de nettoyage

 PRÉCAUTION: Reportez-vous à la section *Nettoyage du boîtier,* recommandée pour le nettoyage de CDT.

 PRÉCAUTION: Appliquez le nettoyant sur un chiffon propre et non pelucheux, puis nettoyez l'appareil. Tout liquide appliqué directement sur l'appareil pourrait couler à l'intérieur et causer des dégâts. Faites preuve de prudence lors du nettoyage autour de l'afficheur du panneau frontal.

PRÉCAUTION: Laissez l'appareil sécher complètement avant de le réutiliser.

PRÉCAUTION: Ne jamais utiliser de produits abrasifs.

PRÉCAUTION: Ne jamais utiliser de produits de désinfection corrosifs.

PRÉCAUTION: Toujours diluer les produits de nettoyage selon les instructions du fabricant, ou utiliser la concentration la plus faible possible.

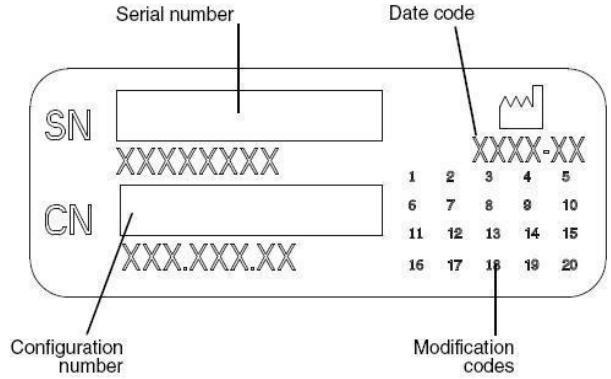
PRÉCAUTION: Ne pas laisser agir le produit de nettoyage sur la surface du dispositif. Essuyez-le immédiatement avec un chiffon non pelucheux et humidifié avec de l'eau. Ne pas le faire pourrait entraîner une décoloration de la surface.

AVERTISSEMENT: Codonics n'émet aucun jugement quant à l'efficacité des produits chimiques ou d'autres méthodes énumérées comme un moyen de contrôle des infections. Consultez l'hygiéniste ou l'épidémiologiste de contrôle de votre hôpital.

Serial Number, Configuration, Date Code, and Modification Codes

The serial number label is placed onto the safety and compliance label. The serial number label includes the following information:

- The serial number (SN), which uniquely identifies the unit.
- The configuration number (CN), which details the build configuration.
- The modification codes, which 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 in YYYY-MM format is located below the factory date code symbol.



Serial number label

Potential for Radio Frequency Interference on Device Operation

Both portable and mobile RF communications equipment can affect medical electrical equipment, including the CDT. The CDT is intended for use in the electromagnetic environment specified in the *Guidance and Manufacturer's Declaration* section.

Potential for Radio and Television Interference

The CDT generates and uses radio frequency energy, and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with Class B emission limits for a computing device in accordance with the specifications in Subpart B of Part 15 of FCC rules, which are designed to provide reasonable protection against such interference when operating in a commercial environment. The CDT is not intended for use in a residential Class A environment. The CDT requires a medical power/ground. If your CDT does cause interference to radio or television reception, you are encouraged to try to correct the interference by one or more of the following measures:

- Reorient the receiving antenna.
- Relocate the CDT with respect to the receiver.

If necessary, you should consult Codonics Technical Support or an experienced radio/television technician for additional suggestions. You may find the following booklet prepared by the Federal Communications Commission helpful: *How to Identify and Resolve Radio-TV Interference Problems*. This booklet is available from the U.S. Government Printing Office, Washington, D.C. 20402, Stock No. 004-000-00345-4.

Le présent appareil numérique n'émet pas de bruits radio-électriques dépassant les limites applicables aux appareils numériques de la Classe B prescrites dans le Réglement sur le brouillage radioélectrique édicté par le ministére des Communications du Canada.

Guidance and Manufacturer's Declaration – Electromagnetic Emissions

The CDT is intended for use in the electromagnetic environment specified below. The customer or the user of the CDT should assure that it is used in such an environment.

CDT is third-party tested and verified compliant with UL 61010-1, CSA 61010-1, IEC 61010-2-040, EN 60601-1-2-2007 3rd Edition, IEC 60601-1-2-207 3rd Edition, Class B Emissions and Immunity for non-life supporting equipment, JIS T 0601-1-2012 as follows:

Emissions Test	Compliance	Electromagnetic Environment – Guidance
RF Emissions CISPR 11/EN 55011	Class B	Electromagnetic compatibility – Generic standards – Emission standard for residential, commercial, and light-industrial environments.
Harmonic Emission IEC/EN 61000-3-2	Class A	
Voltage Fluctuations/Flicker Emissions IEC/EN 61000-3-3	Complies	

Guidance and Manufacturer's Declaration – Electromagnetic Immunity

The CDT is intended for use in the electromagnetic environment specified below. The customer or the user of the CDT should assure that it is used in such an environment.

Immunity Test	Test Level	Compliance Level	Electromagnetic Environment – Guidance
Electrostatic Discharge (ESD) IEC/EN 61000-4-2	Contact Air	6 KV Pass 8 KV Pass	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Radiated, Radio-Frequency, Electromagnetic Field Immunity IEC/EN 61000-4-3		Pass	
Electrical Fast Transient/Burst IEC/EN 61000-4-4	100 – 240 VAC 50/60 HZ	Pass	Main power quality should be that of a typical commercial or hospital environment.
Surge IEC/EN 610000-4-5	100 – 240 VAC 50/60 HZ	Pass	Main power quality should be that of a typical commercial or hospital environment.
Conducted, Radio Frequency, Electromagnetic Field Immunity IEC/EN 61000-4-6		Pass	

Immunity Test	Test Level	Compliance Level	Electromagnetic Environment – Guidance
Power Frequency Magnetic Field Immunity Test IEC/EN 61000-4-8	50/60 HZ	Pass	
Voltage Dips, Shot Interruptions, and Voltage Variations on Power Supply Input Lines IEC/EN 61000-4-11	100 – 240 VAC 50/60 HZ	Pass	Main power quality should be that of a typical commercial or hospital environment. If the user of the CDT requires continued operation during main power interruptions, it is recommended that the CDT be powered from an uninterruptible power supply or battery.

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 *Hazardous Material Information* section.

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 Disinfection Technology and accessories are not to be discarded or recycled; rather they are to be returned to the manufacturer. Contact Codonics directly or by the email link provided for the latest information concerning:

Identification of the country-specific Importer/Distributor/Producer

Product return and treatment of our electronic products

Codonics Incorporated
17991 Englewood Drive
Middleburg Heights, Ohio 44130 USA
Phone: +1.440-243-1198
Fax: +1.440.243.1334
Email: WEEE@codonics.com
Web Site: www.codonics.com

Codonics electronic products and accessories bearing the following symbol are subject to European Directive of 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

Intended Use

The CDT disinfection system is intended to allow authorized trained personnel within the hospital the ability to disinfect a non-critical device (NCD) on demand. Non-critical medical devices make only topical contact with intact skin. Devices suitable for CDT application are smart phones, iPads, tablet PCs and other thin format touch-display devices used in a healthcare environment. CDT is not intended to be used to pre-clean or decontaminate critical or semi-critical medical devices prior to terminal sterilization or high level disinfection.

Device Indications for Use Statement

The CDT disinfection function is achieved through the application of high intensity germicidal UVC light applied at a known intensity and for a known duration. The intention is to allow the user to insert the NCD into the system for disinfection. The user may also elect to place the NCD into a specially designed and manufactured sleeve before processing. The benefit of using the sleeve is to minimize, to the extent possible, any accumulated soil on the NCD and reduce reliance on user diligence for the best possible outcome. Operation of the system is to take place outside of sterile fields and by personnel performing their duties outside of sterile fields. Typical operating personnel are nurses and physicians.

1

Chapter 1: Introduction

Welcome

Thank you for your purchase of Codonics Disinfection Technology.

CDT D6000 "Double-Pass" Model

CDT D7000 "Pass-Through" Model

We are pleased that you chose Codonics Disinfection Technology. We are confident that it will provide safe and effective disinfection for your portable electronic devices.

Product Features

The Codonics Disinfection Technology is a simple device utilizing ultraviolet C spectrum light to disinfect non-critical devices such as smart phones, iPads, tablet PCs and other thin format touch-display devices.

Note: CDT is intended for flat surface devices only and typically should not be used with devices that have significant protrusions. More specifically, the CDT system is able to process devices with small protrusions, such as thin camera lens protrusions on a phone or raised ribs on a tablet. However, large protrusions such as scanners and folding legs on a case are likely to jam in the system.

System Features

- The system enables medical personnel to safely use a portable electronic device, for example, an iPad®, iPhone®, smart phone, or tablet PC in the medical environment where disinfection is appropriate.
- The system uses a disposable, user replaceable cartridge that contains the ultraviolet C (UVC) bulbs and perishable items.
- The geometry and proximity of the ultraviolet C (UVC) bulbs to the object being processed allows 100% coverage of the device.
- The object being processed is unobstructed in the region the disinfecting action is taking place allowing maximum exposure to be applied to the device.

- The transport rollers act both to convey the object and block ultraviolet C (UVC) from escaping the system.

- The system allows for the use of specially designed ultraviolet C (UVC) transmissive sleeves to allow the use of the device in as many applications as possible

- The system continuously monitors ultraviolet C (UVC) output to ensure the required UVC disinfection exposure occurs or the system becomes disabled and alerts the user.

Operational Features

- Easy to service with Codonics Return-to-Factory Warranty. An optional Express Warranty program is also available, which provides a replacement CDT if the problem cannot be solved by our technical support team.

2

Chapter 2: Setting Up the System

Finding a Location for the System

When finding a suitable location for the system, use the following guidelines (along with the information in the *Location Warnings and Precautions* section):

- Place the system in a location with adequate air circulation to prevent internal heat build up.
- Do not place the system 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 supporting the system is level, can support the weight, and will not vibrate or shake when the system is operating.
- Codonics also makes available additional mounting options. The CDT may be wall mounted or placed on a robust mobile base. Please contact your sales agent for greater detail on these optional mounting methods.

Shipped Components

The CDT is shipped in cartons that contain the following system components:

- Codonics Disinfection Technology Unit
- Power Cord
- Cartridge (in separate internal carton)
- Literature: User's Manual, Quick Set Up/Reference Guide and Warranty

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

Save the cartons and packing materials in case you ever need to transport the CDT later.

 PRECAUTION: When removing the CDT, hold under the front and rear of the system. Do not lift the system by the foam packaging.

 PRECAUTION: The CDT weighs 35 to 44 lbs. (15 to 19 kg). To avoid injury, use two people to unpack and position the device.

NOTE: Electronic copies of the CDT software and user documentation may be downloaded from www.codonics.com.

Identifying the Components

CDT Front Components

CDT front components (D6000 shown)

- The **System LED** indicates the state of the CDT.

  The following LED lighting conditions will be presented:

  - After turning on power, the **System LED** will blink Green in one second intervals indicating that the system is starting up or warming up from a stand-by mode session. The **System LED** will continue to blink until the UVC sources in the cartridge have achieved the required output levels. The start up process typically requires thirty seconds or less to complete. Upon completion, the **System LED** will illuminate solid green.

- Flashing green **System LED** at two-second interval indicates that the system is processing a device for disinfection. The flashing is displayed during the entire process from entry to exit.

- Green **System LED** indicates system is functional and ready for use.

- The **System LED** is also used to indicate a fault/error condition. If an error is encountered, the **System LED** will blink red providing a code relating to the error mode. The **System LED** will blink a varying number of times depending on the error, pause, then repeat the blinking cycle.

*NOTE: If the **System LED** is blinking Red, the CDT should be powered down and troubleshooting steps should be taken as described in the "Troubleshooting" section.*

- The **Cartridge LED** indicates the status of the cartridge, which contains the ultraviolet C (UVC) bulbs and other components that are consumed with system usage.

  The following **Cartridge** LED lighting conditions will be presented:

  - Solid Green indicates that the cartridge is operating properly and the remaining life is between 3,000 to 200 hours. .

  - A yellow **Cartridge LED** indicates two possible conditions. The most likely condition is that the cartridge will need to be replaced soon. The yellow LED illuminates when the cartridge has 200 hours or less of remaining life. Contact your sales agent to order a replacement cartridge. As an unlikely event, the **Cartridge LED** may also be yellow

if the system is plugged into and operating on a low voltage condition outside of +/-10% tolerance from accepted industry power or the system is too hot from ambient heat. See the troubleshooting section for possible remedies.

- A solid Red **Cartridge LED** indicates that the cartridge needs to be replaced or there is no cartridge installed in the device.

*NOTE: If the red **Cartridge LED** is illuminated, the CDT should be powered down for a **Cartridge** replacement as described in the "Installing the Cartridge" section.*

- The **Max Defense LED** is illuminated Solid green when the Max Defense function is enabled. **T**oggling the **Max Defense** button on and off (via the Check Mark - see below) causes the **Max Defense LED** to cycle on and off indicating the status of Max Defense. Please see the section on Max Defense for information on this function.

- The **Entry Slot** is the location in which an item will be placed to process in the system. Note that the **Entry Slot** on the vertically operating CDT (D7000) unit moves upward 8" (20 cm) when opening the unit to replace a cartridge or clearing an object in the drive path. Assure that the **Entry Slot** is accessible when the **Tray** is in the upward most position.

- The **Check Mark** is both an indicator and a button.

    - As an indicator, the **Check Mark LED** (backlighted) is flashed to notify the user that the disinfection cycle has been completed.
    - As a button, touching the **Check Mark** toggles the Max Defense mode on and off. (See Max Defense) Toggling the **Max Defense** button on

and off causes the **Max Defense LED** to indicate the status of Max Defense on and off.

- The **Cancel Button** is pressed by the user once to reverse the transport direction or twice in succession to fully stop the disinfection process due to a jammed condition or other problems.

- The **Open Button** is pressed by the user to perform servicing and cartridge replacement. On the D6000: Pressing the **Open Button** causes a knob to extend outward. To open the device, pull on the knob until the **Tray** slides forward. If needed, pull on the knob and simultaneously apply gentle pulling force on the entrance bezel to assist in opening the **Tray**. To close, press in the knob until it clicks into its recessed position and then push the **Tray** into the closed position.

- On the D7000: Pressing the **Open Button** causes a knob to extend outward. After pressing the **Open Button** to raise the pull knob, press downward on the faceplate to allow the catch mechanism to disengage. The faceplate will only move downward a small amount, and after pressure is released, the **Tray** will begin to move upward with the **Assist-Lift Gas Spring**. Raise the **Tray** to its maximum extension by pulling on the knob until the **Tray** reaches the end of its travel. To close, press in the knob until it clicks into its recessed position and then push the **Tray** downward into the closed position. Press firmly downward to overcome the spring assist to close the **Tray**. The **Open Button** must be in the recessed position or the **Tray** will not remain closed.


WARNING: Disconnect the power cord from the wall outlet before servicing to avoid the possibility of electric shock.


WARNING: Turn the system off before opening the front panel to avoid the possibility of electric shock.

"Pass-Through" Model (D7000) Receiving Area Components

CDT D7000 Receiving Area components

- The **Receiving Area** provides access to the user for items that have been processed through the disinfection cycle.

- The **Receiving Area Pad** is a custom engineered shock absorbing pad designed to transfer the energy from the dropping device into the surrounding cavity after disinfection

processing has been completed. The receiving area pad reduces landing forces by up to 95%.

- The **Receiving Area Door** blocks the low level UVC light that is gently disinfecting the **Receiving Area** and enables the user to access processed items without direct UVC exposure.

Components Inside CDT Front Panel

Components inside CDT D6000 front panel

Components inside CDT D7000 front panel

- The **Cartridge** contains ultraviolet C (UVC) bulbs and other perishable items. Refer to the *Installing the Cartridge* section.

- The (secure digital) **SD Card Slot** provides a port to update or reload software. Refer to the *Installing Software* section.

- The **Hide Track** (the disinfection route behind the **Cartridge**) provides for user access to remove a jammed item.

 WARNING: Disconnect the power cord from the wall outlet before servicing to avoid the possibility of electric shock.

 WARNING: Turn the system off before opening the front panel to avoid the possibility of electric shock.

 WARNING: Never look directly through the input and output openings of the CDT.

 WARNING: Take care when closing the front panel to avoid finger pinching.

CDT Rear Components

CDT rear components (D6000 shown)

- The **Power Input Port** is used to connect the **Power Cord**. The **Power Input Port** allows for either 100 – 120 volt or 200 – 240 volt **Power Cords**.

- The **Power Switch** powers the CDT on and off. Toggle the **Power Switch** to the "I" position for on and to the "O" position for off.

"Pass-Through" Model (D7000) Back Panel Components

- The **Assist-Lift Gas Spring** eases the effort required to raise the **Tray.** The user presses the **Open Button** on the **Front Panel**, presses downward on the **Front Panel** allowing the catch to release, and then lifts the **Tray**.

- The **Mounting Stand** comes attached to the unit and vertically positions the D7000 model for pass-through processing**.**

CDT D7000 Back Panel components

Installing the Cartridge

The **Cartridge** for the disinfection process utilizes ultraviolet C (UVC) bulbs and, in addition to the bulbs, contains other perishable items. Dep**endi**ng upon utiliza**tion of the** CDT, **the Cartridge** is typically expected to be replaced annually. Refer to the *CDT Front Panel* section regarding the LED indicators about the life cycle status for the installed **Cartridge**.

*NOTE: The **Cartridge** assembly is designed to allow the drive system to automatically adjust a small amount to help conform to the wide variety of devices that may be processed. As a result, the top carriage rollers and mounting assemblies may shift and cause a "rattling" sound when the **Cartridge** is shifted left and right. This is normal and is not a malfunction.*

NOTE: The UVC bulbs use low levels of mercury in vapor suspension, but to allow maximum performance, small mercury amalgam pellets are contained inside the bulbs to compensate for changes in vapor density, temperature, and operating profiles. As a result, small rolling balls may be seen moving inside the UVC bulbs. This is normal and is not a malfunction.

The following steps may be performed to install a new **Cartridge**:

*NOTE: The CDT D6000 unit must be in a horizontal position to replace the **Cartridge**. The CDT D7000 unit may be in a vertical position to replace the cartridge.*

*NOTE: The CDT D7000 unit includes an **Assist-Lift Gas Spring** that helps raise the **Tray** after the user starts the lifting process. The CDT 7000 must be located such that the top of the device is accessible when the **Tray** is in the upward most position. The **Tray** raises vertically 8".*

1. Locate the **Cartridge** included with your CDT (replacement **Cartridges** purchased separately).

2. Unbox the **Cartridge** being sure to remove the foam from between the rollers.

*NOTE: The use of unapproved parts including the **Cartridge** will void the Codonics warranty for the CDT unit. See the Ordering Supplies and Parts section.*

3. Toggle the **Power Switch** to the "O" position on the rear of the CDT to power off the system. This step may be omitted as the CDT systems contain integral redundant safety switches that automatically eliminate power to the **Front Panel** and **Cartridge** when the **Tray** is moved from the home position. To access the power switch on the D7000, it is easiest to do so after lifting the tray to its upward most position and accessing the switch through the receiving area.

   Disconnect the **Power Cord** from the wall outlet. This step is recommended for maximum safety. The CDT systems contain integral redundant safety switches that automatically eliminate power to the **Front Panel** and **Cartridge** when the **Tray** is moved from the home position.

4. Press the **Open** button on the **Front Panel** of the CDT.

5. Pull forward on the CDT D6000 **Front Panel** to expose the device **Tray** or on the D7000, first push down on the front panel and then pull up on the knob to expose the device **Tray**. The downward pushing motion is required to release the safety interlock in the knob to allow the tray to be lifted.

*NOTE: The CDT D7000 model includes a louver which is used to block UVC light when the **Receiving Area Door** is raised. This louver may need to be held down when replacing the **Cartridge**. Do not rotate the louver farther than necessary to remove the **Cartridge**.*

6. Holding the **Cartridge** by its handles, which are yellow in color, install the **Cartridge** by aligning it with the two metal vertical pins in the cartridge cavity. Slowly enter the **Cartridge** into the cavity, moving it slightly left or right until the locator pins enter into the provided holes in the bottom of the **Cartridge**. Continue pushing the **Cartridge** down to interlock with the white electronics connector.

7. Press the **Open Button** in until it locks and then close the **Front Panel / Tray** by pushing downward into the unit until the assembly locks into position.

CDT D6000 cartridge loading

CDT D7000 cartridge loading

8. Once the system is powered on and the warm up cycle completes (typically within thirty seconds) the **Cartridge LED** light on the **Front Panel** will be illuminated in green.

WARNING: Only CDT-approved replacement parts should be used when maintaining the device.

WARNING: Disconnect the power cord from the wall outlet before servicing to avoid the possibility of electric shock.


WARNING: Turn the system off before opening the front panel to avoid the possibility of electric shock.


WARNING: Never look directly through the input and output openings of the CDT.

Connecting the Power Cord

1. The D6000 is shipped without the **Power Cord** being connected. The D7000 is typically shipped with the **Power Cord** already connected and secured with cable ties. If installing the **Power Cord** for the first time on the D6000 or replacing the cord on the D7000, follow these instructions. It is important to note that the **Power Cord** on the D7000 is secured into position with cable ties to prevent unintended power loss when opening and closing the **Tray**.

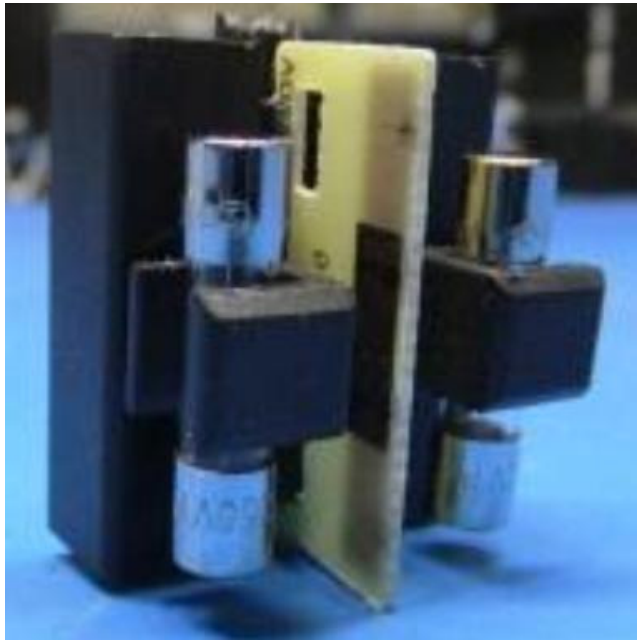
2. Locate the **Voltage Selector Plug** on your CDT unit noting the side of the plug with raised numerals showing the voltage range appropriate for your region. Verify that the **Applied Voltage Arrow** points to the voltage range appropriate for your region (see figure on following page).

*NOTE: The **Voltage Selector Plug** will be factory set for your region, but it is recommended to check prior to energizing the system to avoid tripping fuses.*

3. Locate the **Electrical Socket** on the rear of the CDT noting the location of the recess for the **Voltage Selector Plug** and **Applied Voltage Arrow** on the right hand side of the electrical socket.

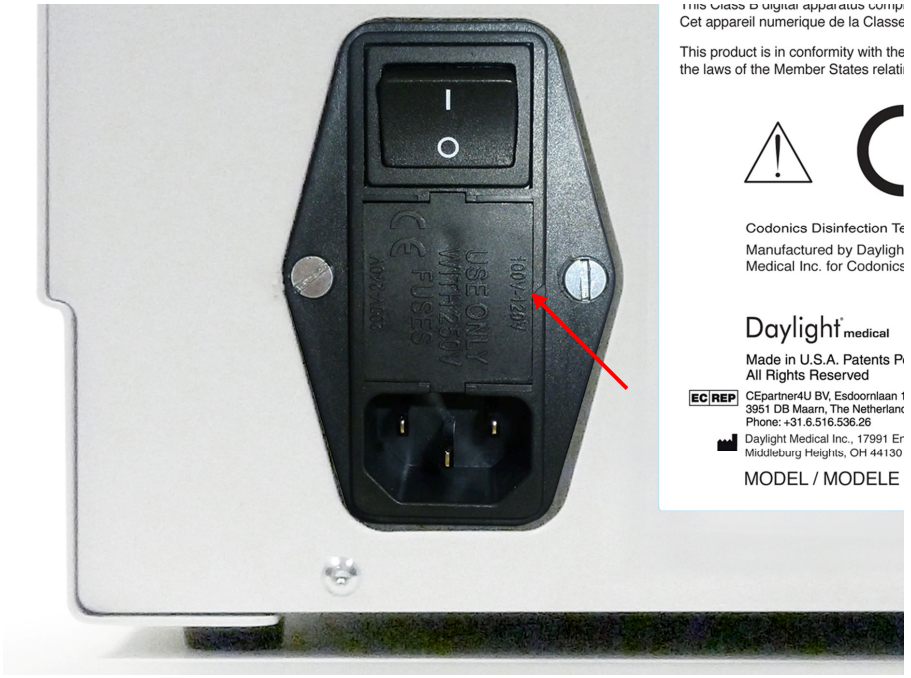
4. With the raised numerals on the **Voltage Selector Plug** showing the voltage range (100-120 or 220-240) appropriate for your region closest to the **Applied Voltage Arrow** on the **Electrical Socket**, assure that the **Voltage Selector Plug** is fully seated in the recess.

5. The **Voltage Selector Plug** houses the fuses for the CDT unit. To check or replace the fuses, refer to the instructions in the CDT D6000 & D7000 Fuse Replacement Technical Brief.



CDT electrical socket fuse housing (removed from unit as shown)

*NOTE: In the D7000 model, it is recommended to view the **Applied Voltage Arrow** when the **Tray** is released and in the upward most position and with an open **Receiving Area Door**. A portable light source may be required for ideal viewing.*



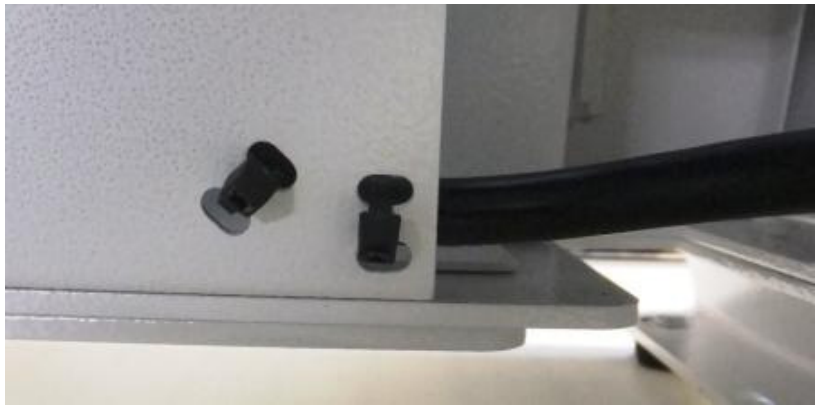
CDT electrical socket (D6000 shown)

6. Locate the **Power Cord** included with your CDT.

7. Plug the **Power Cord** into the **Power Input Port** (either 100–120 volts or 200–240 volts) on the **Rear Panel** of the CDT.

NOTE: In the D7000 model, the Power Cord is typically factory connected.

*NOTE: In the D7000 model, when replacing a **Power Cord** or using an alternate cord, it is recommended to insert the **Power Cord** when the **Tray** is released and in the upward most position and then the **Power Input Port** may be accessed from the front of the unit through the **Receiving Area Door**. The **Power Switch** is also most easily accessed in this manner. Upon replacing the cord, to ensure unintended power loss, secure the **Power Cord** to the rear base using two cable ties as shown below.*



CDT D7000 Power Cord with Cable Ties

8. Connect the **Power Cord** to a grounded power outlet that supplies the appropriate voltage for the applicable country.

CDT power cord connection (D6000 shown)

WARNING: The power cord is the main disconnect for the device. The power outlet should be near the device and be easily accessible.

WARNING: The CDT must be connected to a grounded electrical outlet to maintain grounding reliability.

WARNING: Remove the power cord from the power outlet to disconnect overall power to the device.

 WARNING: Failure to insert the **Voltage Selector Plug** in the proper voltage orientation will cause the fuses in the **Voltage Selector Plug** to blow and will require the user to replace the fuses prior to restore operation. Fuses are not covered under warranty.

Once the **Power Cord** is connected, the CDT can be powered on and off using the **Power Switch** on the **Rear Panel**. In daily operation, there is no need to power on and off the device. The CDT will automatically enter a low power standby mode if unused for 60 minutes. This time selection allows the device to obtain the greatest cartridge life while minimizing delays waiting for the system to warm up. The system automatically restarts upon inserting an object into the entrance slot or pressing the **Cancel Button**.

Powering the System

1. Toggle the **Power Switch** to the "|" position on the **Rear Panel** of the CDT to power on and start up the system.

*NOTE: In the D7000 model, it is easiest to access the **Power Switch** when the **Tray** is released and in the upward most position. The **Power Switch** may be accessed from the front of the unit through the **Receiving Area Door**.*

CDT power switch (D6000 shown)

2. The CDT system conducts an internal status test prior to initiating full power up. The test requires four to five seconds from the moment power is applied and during this period there is no Front Panel LED illumination. Once the test is complete, the System light begins to flash green indicating power up has started.

3. After the warm up process has been completed (typically less than thirty seconds), while the UVC bulbs rise to proper output, the **System** and **Cartridge** lights on the **Front Panel** will be illuminated in solid green. With those indications, the CDT is available for utilization.

4. While not required in normal use, it is possible to power off the system by toggling the **Power Switch** to the "O" position on the rear of the CDT.

NOTE: If there is no system utilization for 60 minutes, the system will enter stand-by mode. The **Cartridge LED** will remain on during standby mode. To reactivate the system, press the **Cancel Button** or partially insert and remove an object into the entrance slot. Upon completion of the warm up process, the unit will be ready for use.

*NOTE: When the **Open Button** on the **Front Panel** is pressed and the **Tray** begins to move forward, the power to the **Front Panel** and **Cartridge** system is immediately turned off as a safety mechanism.*

3

Chapter 3: Disinfection Operations

There are two models – Double-Pass (D6000) and Pass-Through (D7000) – of Codonics Disinfection Technology, which are utilized for disinfecting non-critical devices. The processing technique for both models is described below. The primary difference between the two devices operationally is that the disinfected device enters and exits from the same location in the horizontally operating D6000 while in the vertically operated D7000, the device enters the top and exits from the bottom. The ability to wall and mobile mount the D7000 is a key differentiator in terms of siting.

Max Defense Processing

In addition to the two operating orientations, the systems also allow two processing modes - Standard and Max Defense. The system defaults to Standard processing mode for the fastest possible processing while retaining robust disinfection characteristics. When Max Defense is selected, the transport mechanism operates at a slower rate, significantly increasing the applied dose of UVC light and maximizing the reduction of pathogens. Max Defense allows the CDT to apply 55% more dose to the processed device and requires additional processing time. A phone, for example, will process for an additional twenty seconds, approximately.

The Max Defense mode may be selected by pressing the **Max Defense Button**. The **Max Defense Button** is shared with the **Check Mark** indicator and is identified by the words “Max Defense” over the button. Pressing the **Max Defense Button** repeatedly toggles on and off the Max Defense function and the CDT unit will remain in the selected mode until deactivated by pressing the button again. Note that Max Defense cannot be turned on or off during a processing cycle. The **Max Defense LED** will illuminate when the Max Defense function is selected. The CDT defaults to Standard processing mode when first applying power.

"Double-Pass" (CDT D6000) Processing Technique

In the "Double-Pass" model, all items to be processed are placed into the entrance slot at the front of the machine, the disinfection process cycles, and the disinfected device is presented at the front of the machine. Optionally, use of a Codonics single or two nested ultraviolet C (UVC) transmissive sleeves (each with a **Process Indicator** if that option is present) may be used to enclose a device before processing .See the Sleeve section below for greater details on sleeves.. Placement into the **Entry Slot** requires that the item is face (screen) down, and if a sleeve is used, the sleeve closure (zip or flap) entered first (leading edge).

NOTE: It is recommended that all visible soils be removed prior to processing.

NOTE: Not all devices may be processed through CDT due to the surface area presented. The transport mechanism requires a flat surface on the device to drive properly and significant irregularities in the surface may prevent the CDT from properly transporting the device through the cycle.

NOTE: Using any sleeve other than Codonics Disinfection Technology Sleeves is prohibited and will result in the failure of the device to be disinfected.

To enter a device to be disinfected, the item is fed into the center most position, left to right, of the **Entry Slot** on the **Front Panel** of the CDT. A sensor detects the feeding of an item into the **Entry Slot**, activating the transport mechanism for the disinfection process to be started. The item is processed and automatically returned to the user at the **Entry Slot** in the **Front Panel**.

When inserting a device, the user should apply gentle, but firm pressure until the object is engaged in the drive roller.

The **System LED** will flash green with a two-second interval indicating that the system is processing a device for disinfection. The flashing is displayed during the entire process from entry to exit and indicates that proper disinfection is taking place.

NOTE: A multi-stage UVC blocking mechanism is employed to automatically block UVC light from being emitted from the system and these safeguards must remain in place. These blocking mechanisms are the dark blue and black plastic finger curtains located just inside the device entrance slot and just before the internal entrance to the cartridge. Do not bypass or remove these safeguards. Prolonged UVC exposure may cause temporary but significant eye discomfort and sunburn sensation on exposed skin. Repeated prolonged exposure may cause increased sensitivity to light and photokeratitis. Operating the CDT as intended prevents intermittent and prolonged UVC exposure from occurring. In the event that the CDT is not operated as intended and accidental exposure occurs, seek medical attention if necessary.

The **Check Mark** light on the **Front Panel** flashes in green indicating that the process was completed successfully, and the disinfected item will quickly be returned to the user at the **Entry Slot** for removal.

CDT's check mark illuminated in green showing completed disinfection

"Pass-Through" (CDT D7000) Processing Technique

The "Pass-Through" model is a variation of the "Double-Pass" model, which provides additional options including the following:

- Option to wall mount or use the device on a mobile base to best place the device in accord with user preferences.
- Faster processing by eliminating the return cycle.
- Smaller footprint by vertical mounting the unit to a base.

The "Pass-Through" model includes a **Receiving Area** for the user to easily access processed items. In between disinfection cycles, while the **Receiving Area Door** is in the closed position, the **Receiving Area** is gently disinfected by low-level UVC light to protect the area from any possible contamination introduced by users retrieving their devices. The **Receiving Area Door** blocks UVC light from emitting from the **Receiving Area** and lifting the **Receiving Area Door** automatically deflects UVC away from the **Receiving Area** until the door is again lowered completely.

In the "Pass-Through" model, items can be processed without sleeves or, optionally, they can be placed into Codonics single or two nested ultraviolet C (UVC) transmissive sleeves (each with a **Process Indicator** if that option is present) before being placed into the system. See the Sleeves section for greater details.

NOTE: it is recommended that all visible soils be removed prior to processing.

Placement into the **Entry Slot** requires that the item is face (screen) toward the back of the CDT. Optionally, if sleeves are utilized for processing, the sleeve closure (zip or flap) is required to be entered first (leading edge).

NOTE: Not all device cases may be processed through CDT due to the surface area presented. The transport mechanism requires a flat drive surface and significant irregularities in the surface may prevent the CDT from properly transporting the device through the cycle.

NOTE: Using any sleeve other than Codonics Disinfection Technology Sleeves is prohibited and will result in the failure of the device to be disinfected.

The item is fed into the **Entry Slot** on the **Front Panel** of the CDT, placing the item in the center most position, left to right, of the **Entry Slot**.

When inserting a device, the user should apply gentle, but firm pressure until the object is engaged in the drive roller.

A sensor detects the feeding of an item into the **Entry Slot**, activating the transport mechanism for the disinfection process to be started. The item is processed through CDT and released onto the **Receiving Area Pad** in the **Receiving Area**. To access the processed item, the user simply raises the **Receiving Area Door** to retrieve it. Larger items such as tablets that fill the receiving area are intended to be retrieved by the user gripping the lower edge of the device through the notches of the **Receiving Area Pad**.

The **Receiving Area Pad** has been specially designed to take the weight of the object and transfer its dropping energy into the surrounding materials. Engineering analysis and custom component design collectively reduces g-forces by an additional 70% to 95% over the initial damping depending on the weight of the object.

The **System LED** will flash in green with a two-second interval indicating that the system is processing a device for disinfection. The flashing is displayed during the entire process from entry to exit and indicates that proper disinfection is taking place

NOTE: A multi-stage UVC blocking mechanism is employed to automatically block UVC light from being emitted from the system and these safeguards must remain in place. These blocking mechanisms are the dark blue and black plastic finger curtains located just inside the device entrance slot and just before the internal entrance to the cartridge. Do not bypass or remove these safeguards.

The **Check Mark** light on the **Front Panel** flashes in green indicating that the process was completed successfully, and the disinfected item will be presented in the **Receiving Area** for removal.

 WARNING: The Codonics Disinfection Technology is intended to disinfect non-critical medical devices. The subsequent utilization of the non-critical medical devices disinfected by the CDT is the sole responsibility of the user.

 WARNING: Do not place your hands inside the openings of the CDT before turning off the power to avoid exposing skin to UVC. Prolonged skin exposure may generate redness and an uncomfortable sunburn sensation.

 WARNING: The CDT should not be operated by children.

 WARNING: High Temperature – Internal components of CDT may develop temperatures above 110°F.

 PRECAUTION: The product must be used in accordance with this User's Manual.

 PRECAUTION: Avoid spilling fluids on any part of the CDT.

 PRECAUTION: If spills do occur, immediately disconnect the CDT from the power source and contact Codonics Technical Support for guidance in cleaning the CDT.

 PRECAUTION: Never insert any object not indicated for use with the CDT. See intended use under Indications for Use section.

 PRECAUTION: Do not use any attachments not recommended by Codonics.

Codonics Disinfection Technology Sleeves

Codonics Disinfection Technology Sleeves are optically clear specially manufactured sleeves that are used with a CDT disinfection device to provide maximum defense against pathogen cross-contamination on mobile devices. Specially designed to allow maximum UVC light penetration, CDT Sleeves allow disinfection of the sleeve as well as the tablet/phone surface. Use of CDT Sleeves reduces the accumulation of pathogens in recesses while allowing full operation of tablets and phones, including voice communication and full-touch capability, even if nitrile gloves are worn. Additionally, a select group of CDT Sleeves are available in nested double bags for “clean presentation” for those working in more demanding applications.

A variety of sleeve options are provided to allow the best fit, accommodating a broad array of devices, cases, and covers. Codonics currently offers 12 varieties of phone sleeves and 11 tablet sleeves, (with zip style closures and flap style closures), all offering robust cross-contamination reducing benefits. Once run through the CDT, the sleeved item can be taken into medical settings where infection prevention is desirable. When using a CDT nested sleeve, the outer sleeve is removed once the device has been processed and taken to the use location. The device is then used while remaining in the interior sleeve. After use, the interior sleeve is discarded.

Zip style: Familiar zipper style closure, form fitting, ideal for isolation precaution areas, pediatrics, and for work with and use by immunocompromised patients, best for devices without covers and cases. Zip style sleeves allow the

option of using the device in the sleeve or for providing a “clean presentation” to users for maximum defense against cross-contamination.

Zip style -Double sleeve: Two nested zip style sleeves are used to form the most robust cross-contamination defense possible. Nested sleeves consist of an inner sleeve that is ideally sized for the iPad and iPad mini and a slightly larger outer sleeve. Nested sleeves allow a device to be processed through CDT, then removing the outer sleeve, ideally at the point of use, and then the device can be used while in the inner sleeve. Use case: A tablet is disinfected at a nurse’s station in a double sleeve. The tablet is then taken by the healthcare worker to a patient room in pediatrics. Once the healthcare worker is at the point of use, the healthcare provider removes the outer sleeve and provides the tablet to the pediatric patient to play a game or watch a movie while the tablet is still securely and cleanly enclosed in the inner sleeve. This option is ideal in areas such as isolation areas and oncology floors where patients have significantly compromised immune systems.

Flap style: Flap style sleeves have a flap closure with adhesive strip that allows a user to create a snug fit between the sleeve and their device. Once inside the flap style sleeve, the user can fold the flap over the back of the device to adjust the overall length for a perfect fit. Flap sleeves are ideal for longer/thicker devices, especially those in protective cases, and offer the lowest cost for daily use on phones. Flap style sleeves are not available nested.

Photochromic Process Indicator: The iPad and iPad mini sleeves offer an option with a photochromic process indicator. The **Process Indicator** is activated by high intensity UVC light during processing in CDT and the light blue check mark turns black as a clear visual indication that the device has been processed. The **Process Indicator** is for single use and the color change is permanent.

The **Process Indicator** on the sleeves will change in color revealing a check mark indicating that the process was completed successfully. Use of the **Process Indicator** is an ideal method for quickly visually verifying devices that have been disinfected when using a batch-processing mode.

*Double-sleeved iPad Process Indicator **before** disinfection*

*Double-sleeved iPad Process Indicator **after** disinfection*

Why use a CDT sleeve? CDT robustly disinfects device surfaces and its articulated cartridge technology allows 360 degree coverage of the device. However, deep recesses (e.g. speaker, charging jack, earphone inputs) can accumulate pathogens that are not readily disinfected by any technology. CDT Sleeves block pathogens from

accumulating in the device and from circulating in the hospital environment. This scenario is particularly relevant for mobile phones due to their "high touch, high frequency of touch" use. Sleeves are powerful tools for minimizing organic material build up and pathogen contamination particularly when used in pediatrics, but also help protect the most vulnerable immunocompromised patients from cross-contamination.

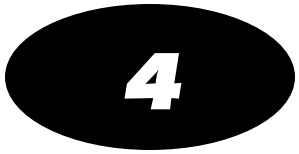
Sleeves can also work as a "clean" transport mechanism. The sleeved device may be processed in CDT away from the point of use, at the nurses station, for example, and then taken to the patient room before removal from the sleeve and provided to the patient in a "clean presentation".

NOTE: *Off the shelf bags and "Zip Lock" bags will not work. CDT Sleeves are designed and manufactured specifically for use in CDT. There are a number of important characteristics to our sleeves, but the key aspect is our ability to allow the maximum amount of UVC light to transmit through the sleeve. This is critical for disinfection of the sleeves and the device within. While off the shelf bags may look clear, they are made of materials that block UVC light and therefore disinfection would not be achieved. Of the hundreds of plastic materials available for sleeve manufacture, only three materials are suitable for use in disinfection with ultraviolet light, and even then, these materials may be employed only when properly designed and manufactured to demanding specifications. CDT Sleeves have undergone extensive evaluation in both laboratory and clinical settings to ensure high efficacy.*

There are many reasons to use a sleeve, but depending on the application, it may be useful to not use a sleeve. Devices may be processed through CDT without a sleeve. In accord with well-established infection prevention protocol, device surfaces should first have any visible soils removed with a dry wipe.

CDT Sleeves are intended exclusively for use in conjunction with a CDT disinfection device. Using sleeves without processing through CDT is not suitable as sleeves are not disinfected out of the box. CDT sleeves are only disinfected when they are processed through a CDT system. The sleeves are not designed to be air tight or waterproof.

To aid finding the best fitting sleeve, we have most major phone manufacturers and models listed on our website, www.codonics.com. If you do not see your manufacturer or device listed, please contact us and we will gladly assist you.



Chapter 4: Maintenance

Ordering Supplies and Parts

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

Parts	Catalog Number
Sleeves	Various sizes and styles available from smart phones to tablet PCs – Please contact your Codonics Customer Service Representative.
Cartridge	CDT-CARTRIDGE
Fuse Set, 120 Volt, 1.6 Amp	SP-00687
Fuse Set, 230 Volt, 1.25 Amp	SP-00688

To order supplies and parts, contact Codonics Customer Service at:

Phone: +1.440.243.1198 (non-US customers)
Toll Free: 1.800.444.1198
Fax: +1.440.243.1334
Email: info@codonics.com
Web Site: www.codonics.com

NOTE: The use of unapproved parts will void the Codonics warranty for the CDT unit.

NOTE: There are no user-serviceable parts inside the CDT unit.

NOTE: Using any sleeve other than a Codonics Disinfection Technology Sleeve is prohibited and will not provide disinfection.

Procedures for Disposal of UVC Bulbs

CDT technology uses bulbs with lower mercury content than typical overhead lighting and cleanup should follow the practices required by your facility and in accord with applicable regulations. As a guideline, if bulbs are broken, ventilate the area where breakage occurred. Clean up with mercury vacuum cleaner or other suitable means that avoid dust and mercury vapor generation. Take usual precautions for collection of broken glass. Clean up requires special care due to mercury droplet proliferation. Place materials in closed containers to avoid generating dust. It is the responsibility of the generator to ensure proper classification of waste products. To that end, TCLP tests should be conducted on all waste products to determine the ultimate disposition in accordance with all applicable federal, state and local regulations.

Special Handling Information for Broken UVC Bulbs

Ventilation: Use adequate general and local exhaust ventilation to maintain exposure levels below the permissible exposure limit (PEL) or threshold limit value (TLV) limits. If such ventilation is unavailable, use respirators as specified below.

Respiratory Protection: Use appropriate NIOSH (National Institute for Occupational Safety and Health) approved respirator if airborne dust concentrations exceed the PEL or TLV limits. All appropriate requirements set forth in 29 CFR 1910.134 should be met.

Eye Protection: OSHA (Occupational Safety and Health Administration) specified safety glasses, goggles or face shield are recommended if bulbs are broken.

Hygienic Practices: After handling broken bulbs, wash thoroughly before eating, smoking or using toilet facilities. In the event that a CDT **Cartridge** arrives in a broken condition and is still inside the bag, keep the bag sealed and discard the **Cartridge** in accord with the practices required by your facility and with applicable regulations. Contact your carrier for procedures to file a damaged goods claim.

Cleaning the Enclosure

 PRECAUTION: Avoid spilling fluids on any part of the CDT.

 PRECAUTION: If spills do occur, immediately disconnect the CDT from the power source and contact Codonics Technical Support for guidance in cleaning the CDT.

 WARNING: Always power off the system before cleaning. An electrical shock could occur if the system is powered on and liquid is spilled into it.

NOTE: Refer to the Powering the System section.

To clean the system's enclosure without physical or cosmetic degradation, use a clean, lint-free cloth moistened with one of the following:

- Phenolic Disinfectant Cleaner (meets VII.d.4 of AORN recommendation)
- 1 part household bleach and 5 parts water (meets VII.e.2. of AORN recommendation)
- A-456-N Disinfectant
- Virex256 Disinfectant

- Isopropyl Alcohol, 70% solution

The following pre-moistened disposable cloths may also be used for cleaning the enclosure:

- PDI Sani-Cloth HB
- PDI Sani-Cloth PLUS
- PDI Super Sani-Cloth

Cleaning Precautions

To avoid damage to the device, observe the following general precautions for cleaning the device:

 PRECAUTION: Apply the cleaner to a clean, lint-free cloth first and then clean the device. Liquid applied directly to the device could possibly leak inside and cause damage. Use extra caution when cleaning around the front panel display.

 PRECAUTION: Allow the device to completely dry before operating again.

 PRECAUTION: Never use abrasive materials.

 PRECAUTION: Never use any disinfecting agents that corrode.

PRECAUTION: Always dilute cleaning agents according to the manufacturer's instructions, or use the lowest possible concentration.

PRECAUTION: Do not allow the cleaning agent to remain on the device surface. Wipe off immediately with a lint-free cloth moistened with water.

WARNING: Codonics makes no claims regarding the efficacy of the listed chemicals or methods as a means of controlling infection. Consult your hospital's infection control officer or epidemiologist.

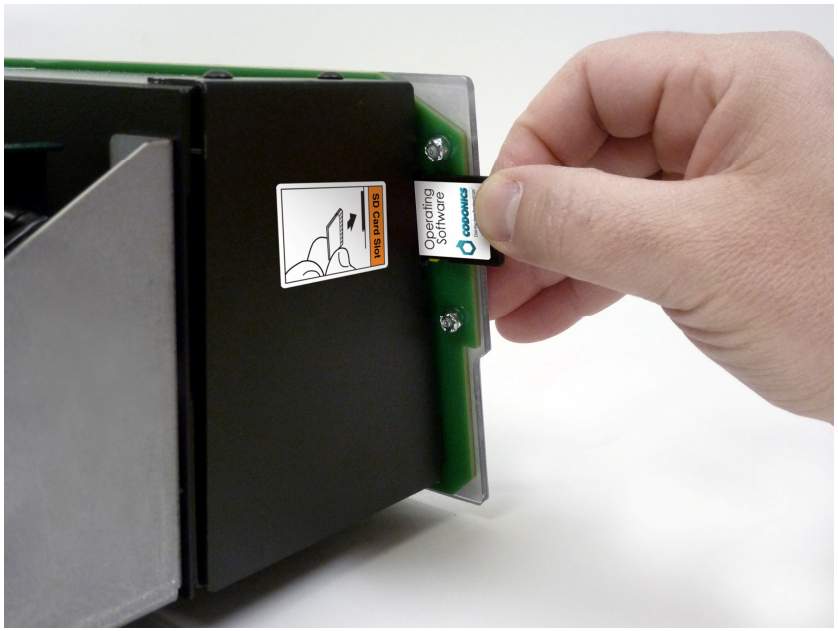
Installing Software

Software Installation

The software installation process may be performed with a secure digital (SD) card, following these steps:

1. Press the **Open** button on the **Front Panel** of the CDT to allow access to the side of the **Front Panel**

2. Insert the SD card into the **SD Card Slot** on the side of the CDT. The slot is identified with a label as shown below. The metal contacts on the SD card must face away from the tray and toward the front panel.



SD Card Insertion for Software Installation

3. Close the **Front Panel** temporarily as the software load takes less than twenty seconds.

4. Upon completion of the software update, the **System LED** light on the **Front Panel** will rapidly flash green.

*NOTE: If the software upgrade fails, the **System LED** light on the **Front Panel** will flash red.*

5. Open the **Front Panel** and remove the SD card from **the SD Card Slot**.

6. Push in the **Open** button until it locks into the recessed position and then close the **Front Panel**.

7. The CDT is now ready for use.

 WARNING: Disconnect the power cord from the wall outlet before servicing to avoid the possibility of electric shock.

 WARNING: Turn the system off before opening the front panel to avoid the possibility of electric shock.

Checking the Software Version

The software version may be checked, following these steps:

1. Toggle the **Power Switch** from the off to on position on the rear of the CDT.. On the D7000, the power switch is not easily accessible, so it is possible to open and close the front panel to achieve power off to on.

2. Immediately, while the system is starting up, press the **Cancel** button repetitively, typically three times.

3. Observe the LED lights (**System** and **Cartridge**) and count the number of green flashes from each one. The **System** light will blink first, then the **Cartridge** light, and then, if there is a third place digit in the software version, the System light will display the third digit. For example, **System** light flashing 2 times, and **Cartridge** light flashing 8 times and **System** light flashing once indicates software version 2.8.1. If the **System** light does not flash after the **Cartridge** light, the third digit is a zero.

4. After the software version is displayed, the system will continue the normal booting process.

Chapter 5: Troubleshooting

Status Indicators

The front panel includes LED-style indicator lights to provide overall status of the CDT.

The front panel LED lights will flash to signify the status of the system. Each light has multiple states. Green indicates proper operation, yellow indicates that an action will be required soon, such as replacing the UVC cartridge, and red indicates an error condition.

The system will be inoperable if any of the lights are red and action must be taken to restore proper function.

Here is a summary of the LED lighting on the front panel showing indicator status for the **System** and **Cartridge**:

- The **System LED** indicates the state of the CDT.

  The following LED lighting conditions will be presented:

- Flashing green in one second intervals during power up indicates that the system is starting up or warming up from power off or standby mode.

- Solid green indicates that the system is functional and ready for use.

- During operation, flashing green in one second intervals indicates that the system is processing a device.

- Solid red and flashing red indicate a fault/error condition.

- When the system has entered standby mode due to inactivity, the **System LED** will be off and the **Cartridge LED** will be on displaying the status of the **Cartridge**.

*NOTE: If the **System LED** is red, the CDT should be powered down and troubleshooting steps should be taken as described in the Troubleshooting section.*

- The **Cartridge LED** indicates the status and remaining life of the cartridge, which contains the ultraviolet C (UVC) bulbs and other perishable items.

  The following LED lighting conditions will be presented:

  - Green indicates that the **Cartridge** is operating properly and there is greater than 200 hours of useful life remaining.

  - Yellow indicates that there are 200 hours or less of **Cartridge** life remaining.

- Red indicates that the cartridge life has been consumed and the **Cartridge** needs to be replaced.

*NOTE: The **Cartridge LED** may illuminate yellow and then return to green due to reduced output. Reduced output may occur if the power supplied to the unit is low, the unit is operated in hot or cold environments, or the bulb is nearing its end of useful life and the duty cycle is high or any of these items in combination. However, the system is fully functional and achieves the intended function in these conditions. The system will not allow processing if UVC output is below appropriate levels to achieve the intended function.*

*NOTE: If the red **Cartridge LED** is illuminated, the CDT should be powered down for a **Cartridge** replacement as described in the "Installing the Cartridge" section.*

The **Max Defense LED** indicates the state of the Max Defense option.

Solid green indicates that the Max Defense option is selected and the system will process according to the Max Defense (slower) processing speed.

Troubleshooting Common Problems

The CDT system indicates problems and allows resolution in two levels.

At the first level, the system will stop processing and the RED Cancel light will blink. Upon addressing the issue immediately, such as removing an item left in the entrance slot for more than fifteen seconds after processing, pressing the Cancel button will return the system to full operation.

At the second level, the system will power down and turn off the UVC bulbs. This action is taken to prevent any object from being positioned inside the UVC cartridge for extended periods. In order to return the unit to full operation, the power must be cycled and this may be accomplished in the fastest manner by opening the tray a small amount to de-energize the system. Upon returning the tray to its closed position, power is restored and normal operation resumes.

The following table lists common problems, their possible causes, and how to solve them. Additionally, the CDT provides error codes by flashing the **System LED**. The CDT flashes the error code number on the **System LED**, pauses, and then repeats the error code. Count the number of flashes of the **System LED** and refer to the following table.

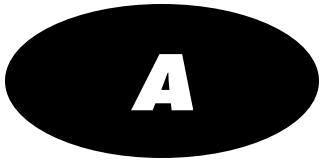
Problem	Possible Causes	Solutions
The System LED flashes red.	2 Flashes - Something is stuck in the cartridge	Check the Cartridge for any items/devices stuck in the cartridge.
	3 Flashes - Something is in the entrance slot	Clear any objects from within the entrance slot.
	4 Flashes - The Cartridge has exceeded its useful life	Replace it with a new Cartridge.
	5 and 6 Flashes are not used currently	
	7 Flashes - The UVC bulb output is too low	The system environment may be too cold or too hot - move the device to a warmer area or, if too warm is suspected, temporarily discontinue use of the device to allow it to cool and try again or move the device to a cooler environment.

Problem	Possible Causes	Solutions
	8 Flashes - The system temperature is too high	The voltage applied to the unit may be low from the outlet - try relocating the device to use a different outlet in the room. The UVC bulb output may be low due to normal aging of the bulb and combined with any other operational influence of higher temperature, lower voltage, continuous product use with longer products in Max Defense mode - ensure operating voltage and temperature are within established limits and, if needed, temporarily discontinue use of the device to allow it to cool and try again. Continued indication of this code reflects that the cartridge needs to be replaced. The system environment may be too hot - temporarily discontinue use of the device to allow it to cool and try again or move the device to a cooler environment.
	9 Flashes - The cartridge version does not work with the system version	The software version on the system must operate with the cartridge version. Contact Technical Support to obtain the appropriate free software for your system. The software may be downloaded from our website and loaded on to an SD card for use in the system.

Problem	Possible Causes	Solutions
	10 Flashes - The cartridge version is not compliant with the system	Contact your sales representative to order the correct cartridge. Software loading will not resolve the issue.
	11 Flashes - The Cartridge ID does not match	Contact Codonics Technical Support.
	12 Flashes - The Cartridge OEM ID does not match	Contact Codonics Technical Support.
The Cartridge LED is red.	A Cartridge is not installed	Install a Cartridge.
	The Cartridge is not seated properly	Remove the Cartridge and try reseating in the System.
	Cartridge needs replaced as it reached its life span	Install a new Cartridge.
	There is something in the rollers of the Cartridge	Open the System and remove any devices or other items in the rollers of the Cartridge.

Problem	Possible Causes	Solutions
The Cartridge LED is yellow.	The Cartridge is nearing end of life	Order a new Cartridge and prepare to replace the consumed Cartridge when the Cartridge LED turns red.
	The UVC output is below optimum (Note that it is fully acceptable to operate the system if the cartridge LED is yellow. The system will not allow the device to operate if there is not sufficient power to disinfect properly)	The UVC bulb output may be low due to normal ageing of the bulb and combined with any other operational influence of higher temperature, lower voltage, continuous product use with longer products in Max Defense mode - ensure operating voltage and temperature are within established limits and if needed temporarily discontinue use of the device to allow it to cool and try again. Continued indication of this code reflects that the cartridge needs to be replaced.
The LED lights are not illuminated on the front of the System.	The power cord is disconnected	Check the power cables. Check the power supply switch on the rear panel.
	The Front Panel is not fully closed	Depress the Open button until it is flush with the System face. Make sure the tray is firmly locked into place.
	A fuse may be blown	Contact Codonics Technical Support for replacement fuse information.

Problem	Possible Causes	Solutions
The System flashes the red Cancel button.	A device is left in the inlet slot of the System after processing or there is something stuck in the cartridge	Open the tray and remove any jammed or left behind devices. The knurled knobs on the side of the Cartridge may assist in rolling out the jammed device.
There is a chattering noise in the System.	An object is not feeding properly through the cartridge	Open the tray and remove the object. Look for protrusions or irregular surfaces that may prevent the device from properly running through the system. If no issues are observed, try running the device through again. Contact Technical Support for further resolutions.
	The Cartridge is not installed properly	Remove the Cartridge and try reseating in the unit or install a new Cartridge.
	The device being disinfected is not supported at this time	Try disinfecting a different type of device.
	A jam has occurred in the feed system	Open the tray and remove any jammed object and re-process. Continued jamming may reflect that the device cannot be disinfected in the System.



Appendix A: Hazardous Material Information

Materials of Construction

Daylight Medical 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:

- Mercury, except as used in lamp applications (for example, scanning lamps, backlit LCDs).
- Cadmium, except as used as thick film inks on printed circuit boards.
- Hexavalent Chromium, except as used as thick film inks on printed circuit boards, as chromate conversion coatings on metal surfaces, and as a photoresist on glass panels of cathode ray tubes.
- Polybrominated diphenyl ethers and polybrominated biphenyls.

- 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

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

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

- *Mercure, sauf dans le cas de systèmes d'éclairage (lampe à balayage, rétroéclairage LCD).*
- *Cadmium, à l'exception des encres de couche épaisse sur les circuits imprimés.*
- *Chrome hexavalent, à l'exception des encres de couche épaisse sur les circuits imprimés, des protection de surface métallique et des photo résistances de tubes cathodiques.*
- *Des éthers de diphényl polybromé ou des biphényls polybromés.*

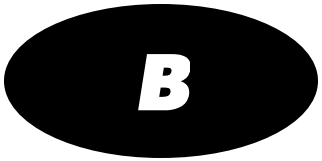
- *Arsenic (de très faible quantité d'arsénic sont présents dans le verre, les leds et les semi-conducteurs sans portée atteinte à l'organisme).*
- *Cristaux de silicium.*
- *Biphenyls polychlorés.*
- *Amiante.*
- *Matières organiques.*
- *Substances portant atteinte à la couche d'ozone tels que des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

Manufacturing

During manufacturing operations that produce Daylight Medical 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 Daylight Medical.



Appendix B: Specifications

Specifications (English)

System:	Integrated system for device disinfection, cartridge with ultraviolet C (UVC) bulbs.
Cartridge:	Two ultraviolet C (UVC) bulbs, UVC sensors, transport rollers, microcontroller, drive stepper motor and fans.
UVC Bulb:	Wattage 27 Current 800 mA Voltage 34 V UVC Watts 7.5
Dimensions:	Height: D6000 - 5.25 in (13.3 cm), D7000 - 23.125 in (60.64 cm) Width: D6000 - 15 in (38.1 cm), D7000 - 15 in (38.1 cm) Depth: D6000 - 20 in (50.8 cm), D7000 - 14 in (35.56 cm)
Entry Slot Device Size:	Height (maximum): 1.0 in (2.5 cm) Width (maximum): 8.0 in (20.3 cm) Depth (maximum): 10.8 in (30.5 cm)
Weight:	Less than 44 lbs. (18.1 kg)

Power Supply:	Internal: 100-240 VAC, 50-60 Hz
Ballast:	Line Current (A): 0.53 – 0.45 – 0.19 Input Power (W): 54 Maximum Current THD (%): ≤ 10 Ballast Type: Electronic
Noise:	Idle: <35dBA Operating: <40dBA
Environmental:	*Operating:* Temperature: 40 to 86°F (4 to 30°C) Humidity: 20 to 80% (non-condensing) *Shipping and Storage:* Temperature: 30 to 100°F (2 to 38°C) Humidity: 20 to 85% (non-condensing)
Compliance & Regulatory:	Safety IEC61010-1 2nd edition, Safety IEC61010-2-040 (particular to disinfection equipment), and EMC IEC60601-1-2. Class B. FDA 880.6890 General Purpose Disinfectants.
Classification:	Class 1 equipment, Product Code LRJ, Disinfectant, medical devices.

Specifications (French)

Système:	Système intégré pour la désinfection de l'appareil, avec cartouche d'ampoules ultraviolets C (UVC).
Cartouche:	Deux ampoules ultraviolets C (UVC), capteurs UVC, rouleaux de transport, microcontrôleur, moteur d'entraînement pas à pas et ventilateurs.
Ampoule UVC:	Puissance 27 Watts Courant 800 mA Tension 34 V UVC 7,5 Watts
Dimensions:	Hauteur: D6000 - 13.3 cm, D7000 - 60.64 cm Largeur: D6000 - 38.1 cm, D7000 - 38.1 cm Profondeur: D6000 - 50.8 cm, D7000 - 35.56 cm
Dimension de la fente d'entrée de l'appareil:	Hauteur (maximale): 2,5 cm Largeur (maximale): 20,3 cm Profondeur (maximale): 30,5 cm
Poids:	Moins de 18 kg
Alimentation:	Interne: 100-240 VAC, 50-60 Hz
Ballast:	Courant de ligne: 0.53 - 0,45 - 0,19 A Puissance d'entrée: 54 W THD actuelle maximale (%): ≤ 10 Type de ballast: électronique

Bruit:	En veille: < 35 dBA En fonctionnement: < 40 dBA
Conservation :	*En fonctionnement:* Température: entre 4 et 30 °C Humidité: 20 à 80% (sans condensation) *Transport et de stockage:* Température: entre 2 et 38 ° C Humidité: 20 à 85% (sans condensation)
Conformité et réglementation:	Sécurité IEC61010-1 2ème édition, sécurité IEC61010-2-040 (notamment pour l'équipement de désinfection), et EMC IEC60601-1-2. Classe B. FDA 880.6890 désinfectants à usage général.
Classification:	Equipement de classe 1, code produit LRJ, produits désinfectants, dispositifs médicaux.