

# Cleaning and disinfecting Supplement



Cleaning and disinfecting  
English  
1st Edition  
2110145-001  
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For technical documentation purposes, the abbreviation GE is used for the legal entity name, GE Medical Systems *Information Technologies*, Inc., and GE Healthcare Finland Oy.

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# 1

## Introduction

### About this supplement

#### Document intended use

This document supplies information for clinical representatives and technical personnel so they can clean and disinfect the devices.

The cleaning/disinfecting schedule must comply with the policies of the institution's infection control unit and/or biomedical engineering department.

#### Documentation conventions

This document uses the following styles to emphasize text or indicate action.

| Item               | Description                                       |
|--------------------|---|
| <b>bold</b>        | Indicates hardware terms.                         |
| <b>bold italic</b> | Indicates software terms.                         |
| <i>italic</i>      | Indicates terms for emphasis.                     |
| +                  | Indicates keyboard keys to select simultaneously. |
| >                  | Indicates menu options to select consecutively.   |
| X                  | supported   |
| -                  | not supported                                     |
| (7)                | Indicates page number.                            |

#### Illustrations and names

This document uses illustrations as examples only. Illustrations in this document may not necessarily reflect all settings, features, configurations, or displayed data.

Names of persons, institutions, and places and related information are fictitious; any similarity to actual persons, entities, or places is purely coincidental.

#### Ordering documentation

A paper copy of this document will be provided upon request. Contact your local GE representative and request the paper document part number on the first page of the document.

# Safety

## Safety message signal words

Safety message signal words designate the severity of a potential hazard. The signal words danger, warning, caution, and notice are used throughout this document to point out hazards and to designate a degree or level of seriousness. A hazard is defined as a source of potential injury to a person. Learn their definitions and significance.

|                |   |
|----------------|---|
| <b>DANGER</b>  | Indicates a hazardous situation that, if not avoided, will result in death or serious injury.                         |
| <b>WARNING</b> | Indicates a hazardous situation that, if not avoided, could result in death or serious injury.                        |
| <b>CAUTION</b> | Indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.                       |
| <b>NOTICE</b>  | Indicates a hazardous situation not related to personal injury that, if not avoided, could result in property damage. |

The order in which safety messages are presented in no way implies the order of importance.

# 2

## CARESCAPE PDM

### Cleaning and disinfection overview

The following cleaning and disinfection information applies to devices, device components, supplies, and accessories manufactured by GE.

The information provided in this chapter does not supersede any instructions for use provided by the manufacturer or provided with a device, device component, supply, or accessory.

For cleaning, disinfection, and care information for devices, device components, supplies, and accessories made by manufacturers other than GE, see the applicable instructions for use provided by the manufacturer.

## Cleaning

### Cleaning warnings

- |                |  |
|----------------|--|
| <b>WARNING</b> | Before cleaning or disinfecting, disconnect the device from the power source.  |
| <b>WARNING</b> | Avoid using chemicals other than the ones described in this document, as they may damage device surfaces or labels, or cause equipment failures.   |
| <b>WARNING</b> | Do not pour or spray any liquid directly on the device, cables, or leadwires or permit fluid to seep into connections or openings.   |
| <b>WARNING</b> | Never immerse any part of the device, cables, or leadwires in liquids or allow liquid to enter the interior of the device.   |
| <b>WARNING</b> | Do not autoclave any part of the system with steam (including cables or leadwires) or sterilize with ethylene oxide.   |
| <b>WARNING</b> | Never use conductive solutions, oxidizing compounds, wax, or wax compounds to clean device.  |
| <b>WARNING</b> | If liquid has accidentally entered the system or its parts, disconnect the power cord from the power supply, remove the battery, and have the equipment serviced by qualified service personnel. |

## Cleaning cautions

### CAUTION

Do not apply pressurized air or gas to any outlet or tubing connected to the monitor. Pressure may destroy sensitive elements.

## Permitted detergents

The following permitted detergents can be used to clean the device and other non-applied parts unless there are separate part-specific instructions. Non-applied parts refer to those parts of the system that are not in direct contact with the patient.

- Water
- Enzymatic or neutral pH detergents

## Cleaning points to note

- Warranty does not cover any damages caused by using substances or methods not approved by GE.
- GE makes no claims as to the efficacy of the listed substances or methods to control infection.
- Always dilute cleaning and disinfectant agents according to their manufacturer's instructions. Always consider your hospital guidelines as well.
- Your hospital guidelines permitting, all cleaning and disinfection activities can be carried out at the bedside.
- Do not let liquid pool around connection pins. If this should happen, blot dry with a soft, lint-free cloth.
- Do not use excessive drying techniques, such as oven, forced heat, or sun drying.
- Do not spray cleaner directly on the display screen.
- Never connect any device or applied part to a patient until it is thoroughly dry.
- If you discover any signs of deterioration or damage in the device, discontinue its use.

## General cleaning instructions

Follow these instructions to clean the devices and other non-applied parts unless the other parts provide part-specific instructions. Non-applied parts refer to those parts of the system that are not in direct contact with the patient.

1. Disconnect the device from the host.
2. Remove all cables and the battery.
3. Close the battery door.
4. Dampen a soft lint-free cloth with one of the permitted detergents.
5. Wring excess liquid from the cloth and wipe the exterior surface. Pay special attention to hard-to-clean areas, like grooves and crevices.
  - Remove any soil as soon as possible after use by wiping the device.
  - Any contact of cleaning solutions with metal parts may cause corrosion.
  - Do not damage or bend connector pins when cleaning or drying.
  - Do not let fluid pool around connection pins. If this happens, blot dry with a cotton swab or soft cloth.

6. Wipe off the cleaning solutions with a clean, lightly moistened cloth.
7. Visually ensure that the device is clean. If visible soil remains, repeat cleaning procedure until the device is thoroughly clean.
8. Dry thoroughly with a dry, lint-free cloth and let air dry for at least 30 minutes.  
Drying times may vary based on the environmental conditions.
9. Install the battery and close the battery door.
10. Reconnect all cables.
11. Reconnect the device to the host.

## Battery compartment cleaning

|               |   |
|---------------|---|
| <b>NOTICE</b> | The battery compartment is not waterproof.  |
| <b>NOTICE</b> | Make sure fluids do not enter the electronics through the air holes in the battery compartment floor.                           |
| <b>NOTICE</b> | Cleaning the battery compartment in a manner other than that specified may cause the unit to malfunction and void the warranty. |

Under normal conditions, the battery compartment should not require cleaning. If the battery compartment does require cleaning, then use the following instructions.

1. Remove the battery from the battery compartment.
2. Dampen a soft lint-free cloth with one of the permitted detergents.
3. Wring excess liquid from the cloth and wipe the interior of the battery compartment. Make sure moisture does not enter the electronics area below the battery compartment floor.
4. Wipe off the cleaning solutions with a clean, lightly moistened lint-free cloth.
5. Dry thoroughly with a soft lint-free cloth. Allow the battery compartment to air dry completely prior to closing the compartment door.  
Drying times may vary based on the environmental conditions.
6. Install the battery and close battery door.

## Other manufacturer cleaning instructions

For details about cleaning and disinfection information for devices, device components, supplies, and accessories made by manufacturers other than GE, see the applicable instructions for use provided by the manufacturer.

Do not reuse single-use disposable accessories.

# Disinfection

## Disinfection notices

### NOTICE

STRESS CRACKING. Some rigid plastics used in this product are susceptible to stress cracking as a result of prolonged exposure to some disinfecting agents, Quaternary Ammonium based agents in particular. Cracks may be precipitated and crack growth accelerated from subsequent rough handling or unintended use. Continued use of this type of disinfecting agents and/or disinfecting methods may degrade materials and lead to eventual fracture.

### NOTICE

COLOR SHIFT. Some plastics may experience a slight change in color over time due to effects of disinfecting agents. This effect is cosmetic and not associated with product safety or normal function.

## Disinfection points to note

- Always clean before disinfecting.
- Always dilute cleaning and disinfectant agents according to their manufacturer's instructions. Always consider your hospital guidelines as well.
- Use only the permitted substances.
- Your hospital guidelines permitting, all cleaning and disinfection activities can be carried out at the bedside.
- Before drying a surface after wiping it, wait the minimum time required according to the substance manufacturer's instructions.
- Visually ensure that no substance residue remains on the device.

## Permitted disinfectants

About the following table:

- All third party trademarks are property of their respective owners.
- Trademark names and product availability may vary by country. Consult the column that lists ingredients to determine if an equivalent disinfectant is available in your country.

| Disinfectant     | Manufacturer          | Ingredients   | Type of disinfectant            |
|------------------|-----------------------|---|---------------------------------|
| CaviWipes*       | Metrex Research, LLC. | <ul style="list-style-type: none"> <li>• Diisobutylphenoxyethoxyethyl dimethyl benzyl ammonium chloride - 0.28%</li> <li>• Isopropanol 17.20%</li> <li>• Ethylene Glycol Monobutyl Ether (2-Butoxyethanol) 1 to 5%</li> </ul> | Quaternary ammonium and alcohol |
| Cleanisept Wipes | Dr. Schumacher GmbH   | <p>Cleanisept solution (7.5%) contains as active ingredients:</p> <ul style="list-style-type: none"> <li>• Didecyldimethylammoniumchloride 0.25%</li> <li>• Alkylbenzyldimethylammoniumchlorid 0.25%</li> </ul>               | Quaternary ammonium             |

| Disinfectant                                       | Manufacturer                  | Ingredients  | Type of disinfectant                   |
|--|-------------------------------|--|--|
|  |                               | <ul style="list-style-type: none"> <li>Alkylethylbenzyldimethylammoniumchloride 0.25%</li> </ul>   |  |
| Clinell Universal Sanitizing Wipes                 | GAMA Healthcare               | <ul style="list-style-type: none"> <li>Benzalkonium chloride &lt; 0.5%</li> <li>Didecyldimethyl ammonium chloride &lt; 0.5%</li> <li>Polyhexamethylene biguanide (PHMB) &lt; 0.10%</li> </ul>  | Quaternary ammonium and bisbiguanide   |
| Clinell Sporicidal Wipes                           | GAMA Healthcare               | <ul style="list-style-type: none"> <li>Sodium Percarbonate 40 to 50%</li> <li>Citric acid 5 to 10%</li> <li>Tetra acetyl ethylene diamine 10 to 35%</li> </ul>   | Hydrogen peroxide and peracetic acid   |
| Clorox Hydrogen Peroxide Wipes*                    | Clorox Professional           | <ul style="list-style-type: none"> <li>Hydrogen Peroxide 1.4%</li> <li>Benzyl alcohol 1 to 5%</li> </ul>   | Hydrogen peroxide                      |
| Mikrozid Sensitive Wipes                           | Schülke & Mayr GmbH           | <ul style="list-style-type: none"> <li>Didecyldimethylammonium chloride 0.26%</li> <li>Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides 0.26%</li> <li>Quaternary ammonium compounds, C12-14-alkyl [(ethylphenyl)methyl] dimethyl, chlorides 0.26%</li> </ul> | Quaternary ammonium                    |
| PDI Sani-Cloth AF3 Germicidal Disposable Wipes*    | Professional Disposables Inc. | <ul style="list-style-type: none"> <li>n-Alkyl (68% C12, 32% C14) dimethyl ethylbenzyl ammonium chlorides 0.14%</li> <li>n-Alkyl (60% C14, 30% C16, 5% C12, 5% C18) dimethyl benzyl ammonium chlorides 0.14%</li> </ul> <p>Total of Quats: 0.28%</p>                               | Quaternary ammonium                    |
| PDI Sani-Cloth Bleach Germicidal Disposable Wipes* | Professional Disposables Inc. | <ul style="list-style-type: none"> <li>Sodium Hypochlorite 0.63%</li> </ul>  | Chlorine                               |
| PDI Sani-Cloth HB Germicidal Disposable Wipes*     | Professional Disposables Inc. | <ul style="list-style-type: none"> <li>Benzyl-C12-18-alkyldimethyl ammonium chlorides 0.07%</li> <li>Quaternary ammonium compounds, C12-14-alkyl [(ethylphenyl)methyl]dimethyl, chlorides 0.07%</li> </ul>   | Quaternary ammonium                    |
| PDI Sani-Cloth Plus*                               | Professional Disposables Inc. | <ul style="list-style-type: none"> <li>n-Alkyl (68% C12, 32% C14) dimethyl ethylbenzyl ammonium chlorides 0.125%</li> <li>n-Alkyl (60% C14, 30% C16, 5% C12, 5% C18) dimethyl benzyl ammonium chlorides 0.125%</li> <li>Isopropanol 14.85%</li> </ul>                              | Quaternary ammonium (contains alcohol) |

| Disinfectant                                      | Manufacturer                  | Ingredients   | Type of disinfectant            |
|---|-------------------------------|---|---------------------------------|
| PDI Super Sani-Cloth Germicidal Disposable Wipes* | Professional Disposables Inc. | <ul style="list-style-type: none"> <li>• n-Alkyl (68% C12, 32% C14) dimethyl ethylbenzyl ammonium chlorides 0.25%</li> <li>• n-Alkyl (60% C14, 30% C16, 5% C12, 5% C18) dimethyl benzyl ammonium chlorides 0.25%</li> <li>• Isopropanol 55.00%</li> </ul> | Quaternary ammonium and alcohol |
| PDI Easy Screen Cleaning Wipes*                   | Professional Disposables Inc. | <ul style="list-style-type: none"> <li>• Isopropyl alcohol 70%</li> </ul>   | Alcohol                         |
| Oxivir TB Wipes*                                  | Sealed Air                    | <ul style="list-style-type: none"> <li>• Hydrogen peroxide 0.1 to 1.5%</li> <li>• Benzyl alcohol 1 to 5%</li> </ul>   | Accelerated hydrogen peroxide   |
| Ethanol 70 to 96%                                 | Generic                       | <ul style="list-style-type: none"> <li>• Ethanol</li> </ul>   | Alcohol                         |
| Isopropyl alcohol max. 60% by weight              | Generic                       | <ul style="list-style-type: none"> <li>• Isopropyl alcohol</li> </ul>   | Alcohol                         |
| Bleach [dilute to max. of 0.65%]                  | Generic                       | <ul style="list-style-type: none"> <li>• Sodium hypochlorite</li> </ul>   | Chlorine                        |

\* Available in the United States.

## Disinfecting external surfaces

The decision to disinfect must be made per the institution's requirements with an awareness of the effect on the integrity of the device. Do not use excessive drying techniques (e.g., oven, forced heat, sun drying).

1. Disconnect the device from the host.
2. Remove all cables and the battery.
3. Close the battery door.
4. Dampen a soft lint-free cloth, or use disinfectant wipes with one of the permitted disinfectants.
5. Wring excess liquid from the cloth and wipe the exterior surface. Pay special attention to hard-to-clean areas, like grooves and crevices. Allow disinfecting solution to remain on device per disinfectant instructions or per hospital guidelines.
  - Any contact of disinfecting solutions with metal parts may cause corrosion.
  - Do not damage or bend connector pins when cleaning or drying.
  - Do not let fluid pool around connection pins. If this happens, blot dry with a cotton swab or soft cloth.
6. Wipe off the disinfecting solution with a clean, lightly moistened cloth.
7. Dry thoroughly with a dry, lint-free cloth and let air dry for at least 30 minutes.  
Drying times may vary based on the environmental conditions.
8. Install the battery and close the battery door.
9. Reconnect all cables.
10. Reconnect the device to the host.

# 3

## CARESCAPE V100

### Cleaning and disinfection overview

The following cleaning and disinfection information applies to devices, device components, supplies, and accessories manufactured by GE.

The information provided in this chapter does not supersede any instructions for use provided by the manufacturer or provided with a device, device component, supply, or accessory.

For cleaning, disinfection, and care information for devices, device components, supplies, and accessories made by manufacturers other than GE, see the applicable instructions for use provided by the manufacturer.

## Cleaning

### Cleaning warnings

- |                |  |
|----------------|--|
| <b>WARNING</b> | Avoid using chemicals other than the ones described in this document, as they may damage device surfaces or labels, or cause equipment failures.   |
| <b>WARNING</b> | If liquid has accidentally entered the system or its parts, disconnect the power cord from the power supply, remove the battery, and have the equipment serviced by qualified service personnel. |
| <b>WARNING</b> | Never immerse any part of the device, cables, or leadwires in liquids or allow liquid to enter the interior of the device.   |
| <b>WARNING</b> | Do not autoclave any part of the system with steam or sterilize with ethylene oxide.   |
| <b>WARNING</b> | Do not pour or spray any liquid so that it may seep into connections or openings.  |
| <b>WARNING</b> | Never use conductive solutions, oxidizing compounds, wax, or wax compounds to clean devices, cables or leadwires.  |

## Cleaning cautions

### CAUTION

To prevent cross-contamination, clean the exterior surfaces of the monitor, monitor accessories, and reusable sensors on a regular basis in compliance with your institution's infection control unit and/or biomedical department's local policy.

## Permitted detergents

The following permitted detergents can be used to clean the device and other non-applied parts unless there are separate part-specific instructions. Non-applied parts refer to those parts of the system that are not in direct contact with the patient.

- Water
- Enzymatic or neutral pH detergents

## Cleaning points to note

- Warranty does not cover any damages caused by using substances or methods not approved by GE.
- GE makes no claims as to the efficacy of the listed substances or methods to control infection.
- Always dilute cleaning and disinfectant agents according to their manufacturer's instructions. Always consider your hospital guidelines as well.
- Your hospital guidelines permitting, all cleaning and disinfection activities can be carried out at the bedside.
- Do not let liquid pool around connection pins. If this should happen, blot dry with a soft, lint-free cloth.
- Do not use excessive drying techniques, such as oven, forced heat, or sun drying.
- Do not spray cleaner directly on the display screen.
- Never connect any device or applied part to a patient until it is thoroughly dry.
- If you discover any signs of deterioration or damage in the device, discontinue its use.

## General cleaning instructions

Follow these instructions to clean the device and other non-applied parts unless the other parts provide part-specific instructions. Non-applied parts refer to those parts of the system that are not in direct contact with the patient.

1. Turn off the power on the device.
2. Disconnect the device from the power supply.
3. Remove all cables.
4. Dampen a soft lint-free cloth with one of the permitted detergents.

5. Wring excess liquid from the cloth and wipe the exterior surface. Pay special attention to hard-to-clean areas, like grooves and crevices.
  - Remove any soil as soon as possible after use by wiping the device.
  - Any contact of cleaning solutions with metal parts may cause corrosion.
  - Do not damage or bend connector pins when cleaning or drying.
  - Do not let fluid pool around connection pins. If this happens, blot dry with a cotton swab or soft cloth.
6. Wipe off the cleaning solutions with a clean, lightly moistened cloth.
7. Visually ensure that the device is clean. If visible soil remains, repeat cleaning procedure until the device is thoroughly clean.
8. Dry thoroughly with a dry, lint-free cloth and let air dry for at least 30 minutes.  
Drying times may vary based on the environmental conditions.
9. Reconnect the device to the power supply.
10. Reconnect all cables.
11. Turn on the power to the device.

## Other manufacturer cleaning instructions

For details about cleaning and disinfection information for devices, device components, supplies, and accessories made by manufacturers other than GE, see the applicable instructions for use provided by the manufacturer.

Do not reuse single-use disposable accessories.

## Disinfection

### Disinfection cleaning precautions

#### Disinfection notices

|               |   |
|---------------|---|
| <b>NOTICE</b> | SPOTTING, STAINING, CORROSION. Metal components including fasteners may corrode or become stained or spotted in appearance from continuous exposure to chlorine compounds like bleach. These effects are not associated with product safety or normal function. |
|---------------|---|

### Disinfection points to note

- Always clean before disinfecting.
- Always dilute cleaning and disinfectant agents according to their manufacturer's instructions. Always consider your hospital guidelines as well.
- Use only the permitted substances.
- Your hospital guidelines permitting, all cleaning and disinfection activities can be carried out at the bedside.
- Before drying a surface after wiping it, wait the minimum time required according to the substance manufacturer's instructions.
- Visually ensure that no substance residue remains on the device.

## Permitted disinfectants

About the following table:

- All third party trademarks are property of their respective owners.
- Trademark names and product availability may vary by country. Consult the column that lists ingredients to determine if an equivalent disinfectant is available in your country.

| Disinfectant                       | Manufacturer          | Ingredients  | Type of disinfectant                 |
|------------------------------------|-----------------------|--|--------------------------------------|
| CaviWipes*                         | Metrex Research, LLC. | <ul style="list-style-type: none"> <li>• Diisobutylphenoxyethoxyethyl dimethyl benzyl ammonium chloride - 0.28%</li> <li>• Isopropanol 17.20%</li> <li>• Ethylene Glycol Monobutyl Ether (2-Butoxyethanol) 1 to 5%</li> </ul>  | Quaternary ammonium and alcohol      |
| Cleanisept Wipes                   | Dr. Schumacher GmbH   | <p>Cleanisept solution (7.5%) contains as active ingredients:</p> <ul style="list-style-type: none"> <li>• Didecyldimethylammoniumchloride 0.25%</li> <li>• Alkylbenzyldimethylammoniumchlorid 0.25%</li> <li>• Alkylethylbenzyldimethylammoniumchloride 0.25%</li> </ul>                | Quaternary ammonium                  |
| Clinell Universal Sanitizing Wipes | GAMA Healthcare       | <ul style="list-style-type: none"> <li>• Benzalkonium chloride &lt; 0.5%</li> <li>• Didecyl dimethyl ammonium chloride &lt; 0.5%</li> <li>• Polyhexamethylene biguanide (PHMB) &lt; 0.10%</li> </ul>   | Quaternary ammonium and bisbiguanide |
| Clinell Sporicidal Wipes           | GAMA Healthcare       | <ul style="list-style-type: none"> <li>• Sodium Percarbonate 40 to 50%</li> <li>• Citric acid 5 to 10%</li> <li>• Tetra acetyl ethylene diamine 10 to 35%</li> </ul>   | Hydrogen peroxide and peracetic acid |
| Clorox Hydrogen Peroxide Wipes*    | Clorox Professional   | <ul style="list-style-type: none"> <li>• Hydrogen Peroxide 1.4%</li> <li>• Benzyl alcohol 1 to 5%</li> </ul>   | Hydrogen peroxide                    |
| Mikrozid Sensitive Wipes           | Schülke & Mayr GmbH   | <ul style="list-style-type: none"> <li>• Didecyldimethylammonium chloride 0.26%</li> <li>• Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides 0.26%</li> <li>• Quaternary ammonium compounds, C12-14-alkyl [(ethylphenyl)methyl] dimethyl, chlorides 0.26%</li> </ul> | Quaternary ammonium                  |

| Disinfectant                                       | Manufacturer                  | Ingredients   | Type of disinfectant                   |
|--|-------------------------------|---|--|
| PDI Sani-Cloth AF3 Germicidal Disposable Wipes*    | Professional Disposables Inc. | <ul style="list-style-type: none"> <li>n-Alkyl (68% C12, 32% C14) dimethyl ethylbenzyl ammonium chlorides 0.14%</li> <li>n-Alkyl (60% C14, 30% C16, 5% C12, 5% C18) dimethyl benzyl ammonium chlorides 0.14%</li> </ul> <p>Total of Quats: 0.28%</p>  | Quaternary ammonium                    |
| PDI Sani-Cloth Bleach Germicidal Disposable Wipes* | Professional Disposables Inc. | <ul style="list-style-type: none"> <li>Sodium Hypochlorite 0.63%</li> </ul>   | Chlorine                               |
| PDI Sani-Cloth HB Germicidal Disposable Wipes*     | Professional Disposables Inc. | <ul style="list-style-type: none"> <li>Benzyl-C12-18-alkyldimethyl ammonium chlorides 0.07%</li> <li>Quaternary ammonium compounds, C12-14-alkyl [ethylphenyl]methyl]dimethyl, chlorides 0.07%</li> </ul>   | Quaternary ammonium                    |
| PDI Sani-Cloth Plus*                               | Professional Disposables Inc. | <ul style="list-style-type: none"> <li>n-Alkyl (68% C12, 32% C14) dimethyl ethylbenzyl ammonium chlorides 0.125%</li> <li>n-Alkyl (60% C14, 30% C16, 5% C12, 5% C18) dimethyl benzyl ammonium chlorides 0.125%</li> <li>Isopropanol 14.85%</li> </ul> | Quaternary ammonium (contains alcohol) |
| Bleach [dilute to max. of 0.65%]                   | Generic                       | <ul style="list-style-type: none"> <li>Sodium hypochlorite</li> </ul>   | Chlorine                               |

\* Available in the United States.

## Disinfecting external surfaces

The decision to disinfect must be made per the institution's requirements with an awareness of the effect on the integrity of the device. Do not use excessive drying techniques (e.g., oven, forced heat, sun drying).

1. Turn off the power to the device.
2. Disconnect the device from the power supply.
3. Remove all cables.
4. Dampen a soft lint-free cloth, or use disinfectant wipes with one of the permitted disinfectants.
5. Wring excess liquid from the cloth and wipe the exterior surface. Pay special attention to hard-to-clean areas, like grooves and crevices. Allow disinfecting solution to remain on device per disinfectant instructions or per hospital guidelines.
  - Any contact of disinfecting solutions with metal parts may cause corrosion.
  - Do not damage or bend connector pins when cleaning or drying.
  - Do not let fluid pool around connection pins. If this happens, blot dry with a cotton swab or soft cloth.

6. Wipe off the disinfecting solution with a clean, lightly moistened cloth.
7. Dry thoroughly with a dry, lint-free cloth and let air dry for at least 30 minutes.  
Drying times may vary based on the environmental conditions.
8. Reconnect the device to the power supply.
9. Reconnect all cables.
10. Turn on the power to the device.

# 4

## ApexPro and CARESCAPE Telemetry

### Cleaning and disinfection overview

The following cleaning and disinfection information applies to devices, device components, supplies, and accessories manufactured by GE.

The information provided in this chapter does not supersede any instructions for use provided by the manufacturer or provided with a device, device component, supply, or accessory.

For cleaning, disinfection, and care information for devices, device components, supplies, and accessories made by manufacturers other than GE, see the applicable instructions for use provided by the manufacturer.

### Cleaning

#### Cleaning warnings

|                |   |
|----------------|---|
| <b>WARNING</b> | SHOCK HAZARD. Disconnect AC-powered equipment from the power line before cleaning or disinfecting its surface. Turn off the power to battery powered equipment before cleaning or disinfecting its surface.   |
| <b>WARNING</b> | CONTAMINATED LEADWIRES. Contaminated leadwires may cause infection. Always follow skin preparation guidelines and leadwire cleaning instructions.   |
| <b>WARNING</b> | IMPROPER TELEMETRY MONITORING DEVICE/LEADWIRE APPLICATION. Applying a telemetry monitoring device and/or leadwire that is not thoroughly dry to a patient can result in an electrically conductive path being established and a <b>LEADS FAIL</b> alarm not being provided if leadwires come off the patient. |
| <b>WARNING</b> | Avoid using chemicals other than the ones described in this document, as they may damage device surfaces or labels, or cause equipment failures.  |
| <b>WARNING</b> | Do not pour or spray any liquid directly on the device, cables, or leadwires or permit fluid to seep into connections or openings.  |

|                |   |
|----------------|---|
| <b>WARNING</b> | Never immerse any part of the device, cables, or leadwires in liquids or allow liquid to enter the interior of the device.  |
| <b>WARNING</b> | Do not autoclave any part of the system with steam (including cables or leadwires) or sterilize with ethylene oxide.  |
| <b>WARNING</b> | Never use conductive solutions, oxidizing compounds, wax, or wax compounds to clean devices, cables or leadwires.   |
| <b>WARNING</b> | <p><b>SHOCK HAZARD.</b> In order to remove power from the telemetry server, disconnect the power cord from the wall outlet. The on/off button on the front panel does not disconnect the telemetry server from AC power.</p> <p>Additionally, wait for 30 seconds as the telemetry server remains energized after disconnecting AC power.</p> <p>Failure to follow these instructions could result in electrical shock.</p> |
| <b>WARNING</b> | <p><b>LOSS OF MONITORING.</b> If it is necessary to shut down the telemetry server or receiver subsystem, notify the site's biomedical department to provide alternate bedside patient monitoring.</p>  |
| <b>WARNING</b> | <p>Do not pour or spray any liquid directly on the device or permit fluid to seep into the connectors or openings of the telemetry server. An electrical shock hazard exists and/or damage may result if water is allowed to get inside the telemetry server.</p> <p>Failure to follow these instructions could result in equipment damage and/or electrical shock.</p>   |

## Permitted detergents

The following permitted detergents can be used to clean the device and other non-applied parts unless there are separate part-specific instructions. Non-applied parts refer to those parts of the system that are not in direct contact with the patient.

- Water
- Enzymatic or neutral pH detergents

## Cleaning points to note

- Warranty does not cover any damages caused by using substances or methods not approved by GE.
- GE makes no claims as to the efficacy of the listed substances or methods to control infection.
- Always dilute cleaning and disinfectant agents according to their manufacturer's instructions. Always consider your hospital guidelines as well.
- Your hospital guidelines permitting, all cleaning and disinfection activities can be carried out at the bedside.
- Do not let liquid pool around connection pins. If this should happen, blot dry with a soft, lint-free cloth.
- Do not use excessive drying techniques, such as oven, forced heat, or sun drying.
- Do not spray cleaner directly on the display screen.

- Never connect any device or applied part to a patient until it is thoroughly dry.
- If you discover any signs of deterioration or damage in the device, discontinue its use.

## General cleaning instructions

Follow these instructions to clean the device and other non-applied parts unless the other parts provide part-specific instructions. Non-applied parts refer to those parts of the system that are not in direct contact with the patient.

### Telemetry monitoring devices

1. Remove all cables and the batteries.
2. Close the battery door.
3. Dampen a soft lint-free cloth with one of the permitted detergents.
4. Wring excess liquid from the cloth and wipe the exterior surface. Pay special attention to hard-to-clean areas, like grooves and crevices.
  - Remove any soil as soon as possible after use by wiping the device.
  - Any contact of cleaning solutions with metal parts may cause corrosion.
  - Do not damage or bend connector pins when cleaning or drying.
  - Do not let fluid pool around connection pins. If this happens, blot dry with a cotton swab or soft cloth.
5. Wipe off the cleaning solutions with a clean, lightly moistened cloth.
6. Visually ensure that the device is clean. If visible soil remains, repeat cleaning procedure until the device is thoroughly clean.
7. Dry thoroughly with a dry, lint-free cloth and let air dry for at least 30 minutes.  
Drying times may vary based on the environmental conditions.
8. Install the batteries and close the battery door.
9. Reconnect all cables.

### Battery compartment cleaning (ApexPro FH transceivers only)

|               |   |
|---------------|---|
| <b>NOTICE</b> | The battery compartment is not waterproof.  |
| <b>NOTICE</b> | Make sure fluids do not enter the electronics through the air holes in the battery compartment floor.                           |
| <b>NOTICE</b> | Cleaning the battery compartment in a manner other than that specified may cause the unit to malfunction and void the warranty. |

Under normal conditions, the battery compartment should not require cleaning. If the battery compartment does require cleaning, use the following instructions.

1. Remove the battery from the battery compartment.
2. Dampen a soft lint-free cloth with one of the permitted detergents.
3. Wring excess liquid from the cloth and wipe the interior of the battery compartment. Make sure moisture does not enter the electronics area below the battery compartment floor.

4. Wipe off the cleaning solutions with a clean, lightly moistened lint-free cloth.
5. Dry thoroughly with a dry, lint-free cloth and let air dry for at least 30 minutes. Allow the battery compartment to air dry completely prior to closing the compartment door.  
Drying times may vary based on the environmental conditions.
6. Install the battery and close battery door.

## CARESCAPE Telemetry server: Hardware series MP100R

Complete the following procedure to clean the exterior surfaces of the telemetry server.

1. Shut down the telemetry server. For more information, see the documentation accompanying the telemetry server.
2. Turn off power to the device.
3. Disconnect the device from the power supply.
4. Remove all cables.
5. Dampen a clean, soft lint-free cloth with one of the permitted detergents.
6. Wring excess liquid from the cloth and wipe the exterior surface. Pay special attention to hard-to-clean areas, like grooves and crevices.
  - Any contact of cleaning solutions with metal parts may cause corrosion.
  - Do not damage or bend connector pins when cleaning or drying.
  - Do not let fluid pool around connection pins. If this happens, blot dry with a cotton swab or soft cloth.
7. Wipe off the detergents with a clean, lightly moistened cloth.
8. Dry thoroughly with a dry, lint-free cloth and let air dry for at least 30 minutes.  
Drying times may vary based on the environmental conditions.
9. Reconnect the device to the power supply.
10. Reconnect all cables.
11. Turn on the power to the device.

## Internal components

1. Check that the telemetry server is powered off and unplugged.
2. Disconnect all cords/cables from the telemetry server.
3. Remove the access panels on the telemetry server. Using a compressed air duster recommended for computers and electronics, carefully blow out any accumulated dust.

## Fans

Remove all of the dust from the fans and the fan intakes. The fans and fan intakes usually accumulate the most dust. Accumulated dust can clog the fans and fan intakes and prevent proper cooling.

# Disinfection

## Telemetry monitoring devices

### Disinfection notices

|               |  |
|---------------|--|
| <b>NOTICE</b> | COLOR SHIFT. Some plastics may experience a slight change in color over time due to effects of disinfecting agents. This effect is cosmetic and not associated with product safety or normal function.                   |
| <b>NOTICE</b> | SOFT MATERIALS. The plastics used in this product are porous and may absorb alcohol. Improper use of alcohol based agents could result in softening, swelling, tackiness, or change in appearance of the soft materials. |

### Disinfection points to note

- Always clean before disinfecting.
- Always dilute cleaning and disinfectant agents according to their manufacturer's instructions. Always consider your hospital guidelines as well.
- Use only the permitted substances.
- Your hospital guidelines permitting, all cleaning and disinfection activities can be carried out at the bedside.
- Before drying a surface after wiping it, wait the minimum time required according to the substance manufacturer's instructions.
- Visually ensure that no substance residue remains on the device.

### Permitted disinfectants

About the following table:

- All third party trademarks are property of their respective owners.
- Trademark names and product availability may vary by country. Consult the column that lists ingredients to determine if an equivalent disinfectant is available in your country.

| Disinfectant     | Manufacturer          | Ingredients   | Type of disinfectant            |
|------------------|-----------------------|---|---------------------------------|
| CaviWipes*       | Metrex Research, LLC. | <ul style="list-style-type: none"> <li>• Diisobutylphenoxyethoxyethyl dimethyl benzyl ammonium chloride - 0.28%</li> <li>• Isopropanol 17.20%</li> <li>• Ethylene Glycol Monobutyl Ether (2-Butoxyethanol) 1 to 5%</li> </ul> | Quaternary ammonium and alcohol |
| Cleanisept Wipes | Dr. Schumacher GmbH   | <p>Cleanisept solution (7.5%) contains as active ingredients:</p> <ul style="list-style-type: none"> <li>• Didecyldimethylammoniumchloride 0.25%</li> <li>• Alkylbenzyldimethylammoniumchlorid 0.25%</li> </ul>               | Quaternary ammonium             |

| Disinfectant                                       | Manufacturer                  | Ingredients  | Type of disinfectant                   |
|--|-------------------------------|--|--|
|  |                               | <ul style="list-style-type: none"> <li>Alkylethylbenzyldimethylammoniumchloride 0.25%</li> </ul>   |  |
| Clinell Universal Sanitizing Wipes                 | GAMA Healthcare               | <ul style="list-style-type: none"> <li>Benzalkonium chloride &lt; 0.5%</li> <li>Didecyldimethyl ammonium chloride &lt; 0.5%</li> <li>Polyhexamethylene biguanide (PHMB) &lt; 0.10%</li> </ul>  | Quaternary ammonium and bisbiguanide   |
| Clinell Sporicidal Wipes                           | GAMA Healthcare               | <ul style="list-style-type: none"> <li>Sodium Percarbonate 40 to 50%</li> <li>Citric acid 5 to 10%</li> <li>Tetra acetyl ethylene diamine 10 to 35%</li> </ul>   | Hydrogen peroxide and peracetic acid   |
| Clorox Hydrogen Peroxide Wipes*                    | Clorox Professional           | <ul style="list-style-type: none"> <li>Hydrogen Peroxide 1.4%</li> <li>Benzyl alcohol 1 to 5%</li> </ul>   | Hydrogen peroxide                      |
| Mikrozid Sensitive Wipes                           | Schülke & Mayr GmbH           | <ul style="list-style-type: none"> <li>Didecyldimethylammonium chloride 0.26%</li> <li>Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides 0.26%</li> <li>Quaternary ammonium compounds, C12-14-alkyl [(ethylphenyl)methyl] dimethyl, chlorides 0.26%</li> </ul> | Quaternary ammonium                    |
| PDI Sani-Cloth AF3 Germicidal Disposable Wipes*    | Professional Disposables Inc. | <ul style="list-style-type: none"> <li>n-Alkyl (68% C12, 32% C14) dimethyl ethylbenzyl ammonium chlorides 0.14%</li> <li>n-Alkyl (60% C14, 30% C16, 5% C12, 5% C18) dimethyl benzyl ammonium chlorides 0.14%</li> </ul> <p>Total of Quats: 0.28%</p>                               | Quaternary ammonium                    |
| PDI Sani-Cloth Bleach Germicidal Disposable Wipes* | Professional Disposables Inc. | <ul style="list-style-type: none"> <li>Sodium Hypochlorite 0.63%</li> </ul>  | Chlorine                               |
| PDI Sani-Cloth HB Germicidal Disposable Wipes*     | Professional Disposables Inc. | <ul style="list-style-type: none"> <li>Benzyl-C12-18-alkyldimethyl ammonium chlorides 0.07%</li> <li>Quaternary ammonium compounds, C12-14-alkyl [(ethylphenyl)methyl]dimethyl, chlorides 0.07%</li> </ul>   | Quaternary ammonium                    |
| PDI Sani-Cloth Plus*                               | Professional Disposables Inc. | <ul style="list-style-type: none"> <li>n-Alkyl (68% C12, 32% C14) dimethyl ethylbenzyl ammonium chlorides 0.125%</li> <li>n-Alkyl (60% C14, 30% C16, 5% C12, 5% C18) dimethyl benzyl ammonium chlorides 0.125%</li> <li>Isopropanol 14.85%</li> </ul>                              | Quaternary ammonium (contains alcohol) |

| Disinfectant                                      | Manufacturer                  | Ingredients   | Type of disinfectant            |
|---|-------------------------------|---|---------------------------------|
| PDI Super Sani-Cloth Germicidal Disposable Wipes* | Professional Disposables Inc. | <ul style="list-style-type: none"> <li>• n-Alkyl (68% C12, 32% C14) dimethyl ethylbenzyl ammonium chlorides 0.25%</li> <li>• n-Alkyl (60% C14, 30% C16, 5% C12, 5% C18) dimethyl benzyl ammonium chlorides 0.25%</li> <li>• Isopropanol 55.00%</li> </ul> | Quaternary ammonium and alcohol |
| PDI Easy Screen Cleaning Wipes*                   | Professional Disposables Inc. | <ul style="list-style-type: none"> <li>• Isopropyl alcohol 70%</li> </ul>   | Alcohol                         |
| Oxivir TB Wipes*                                  | Sealed Air                    | <ul style="list-style-type: none"> <li>• Hydrogen peroxide 0.1 to 1.5%</li> <li>• Benzyl alcohol 1 to 5%</li> </ul>   | Accelerated hydrogen peroxide   |
| Ethanol 70 to 96%                                 | Generic                       | <ul style="list-style-type: none"> <li>• Ethanol</li> </ul>   | Alcohol                         |
| Isopropyl alcohol max. 60% by weight              | Generic                       | <ul style="list-style-type: none"> <li>• Isopropyl alcohol</li> </ul>   | Alcohol                         |
| Bleach [dilute to max. of 0.65%]                  | Generic                       | <ul style="list-style-type: none"> <li>• Sodium hypochlorite</li> </ul>   | Chlorine                        |

\* Available in the United States.

## Disinfecting external surfaces (telemetry monitoring devices only)

The decision to disinfect must be made per the institution's requirements with an awareness of the effect on the integrity of the device. Do not use excessive drying techniques (e.g., oven, forced heat, sun drying).

1. Remove all cables and the batteries.
2. Close the battery door.
3. Dampen a soft lint-free cloth, or use disinfectant wipes with one of the permitted disinfectants.
4. Wring excess liquid from the cloth and wipe the exterior surface. Pay special attention to hard-to-clean areas, like grooves and crevices. Allow disinfecting solution to remain on device per disinfectant instructions or per hospital guidelines.
  - Any contact of disinfecting solutions with metal parts may cause corrosion.
  - Do not damage or bend connector pins when cleaning or drying.
  - Do not let fluid pool around connection pins. If this happens, blot dry with a cotton swab or soft cloth.
5. Wipe off the disinfecting solution with a clean, lightly moistened cloth.
6. Dry thoroughly with a dry, lint-free cloth and let air dry for at least 30 minutes.  
Drying times may vary based on the environmental conditions.
7. Install the batteries and close the battery door.
8. Reconnect all cables.



# 5

## CARESCAPE Central Station

### Cleaning and disinfection overview

The following cleaning and disinfection information applies to devices, device components, supplies, and accessories manufactured by GE.

The information provided in this chapter does not supersede any instructions for use provided by the manufacturer or provided with a device, device component, supply, or accessory.

For cleaning, disinfection, and care information for devices, device components, supplies, and accessories made by manufacturers other than GE, see the applicable instructions for use provided by the manufacturer.

## Cleaning

### Cleaning warnings

|                |   |
|----------------|---|
| <b>WARNING</b> | LOSS OF MONITORING. Safely turning off this device and/or removal of the device from mains power should be done by authorized service personnel.<br><br>For more information, see the technical manual.     |
| <b>WARNING</b> | SHOCK HAZARD. Disconnect AC-powered equipment from the power line before cleaning or disinfecting its surface. Turn off the power to battery powered equipment before cleaning or disinfecting its surface. |
| <b>WARNING</b> | Do not pour or spray any liquid directly on the device, cables, or leadwires or permit fluid to seep into connections or openings.  |
| <b>WARNING</b> | Never immerse any part of the device, cables, or leadwires in liquids or allow liquid to enter the interior of the device.  |

### Cleaning cautions

|                |  |
|----------------|--|
| <b>CAUTION</b> | Never use conductive solutions, oxidizing compounds, wax, or wax compounds to clean devices or cables. |
|----------------|--|

|                |   |
|----------------|---|
| <b>CAUTION</b> | DEVICE DAMAGE. Never use solutions or products that contain the following: <ul style="list-style-type: none"><li>• Abrasive cleaners or solvents of any kind</li><li>• Acetone</li><li>• Ketone</li><li>• Betadine</li><li>• Sodium salts</li></ul> |
| <b>CAUTION</b> | DEVICE DAMAGE. Do not autoclave any part of the system with steam (including cables).   |

## Permitted detergents

The following permitted detergents can be used to clean the device and other non-applied parts unless there are separate part-specific instructions. Non-applied parts refer to those parts of the system that are not in direct contact with the patient.

- Water
- Mild soap (diluted) or enzymatic or neutral pH detergents
- Sagrotan (dilution 3:100, containing 75 mg tartaric acid per 100 ml solution).

## Cleaning points to note

- Warranty does not cover any damages caused by using substances or methods not approved by GE.
- GE makes no claims as to the efficacy of the listed substances or methods to control infection.
- Always dilute cleaning and disinfectant agents according to their manufacturer's instructions. Always consider your hospital guidelines as well.
- Your hospital guidelines permitting, all cleaning and disinfection activities can be carried out at the bedside.
- Do not let liquid pool around connection pins. If this should happen, blot dry with a soft, lint-free cloth.
- Do not use excessive drying techniques, such as oven, forced heat, or sun drying.
- Do not spray cleaner directly on the display screen.
- Never connect any device or applied part to a patient until it is thoroughly dry.
- If you discover any signs of deterioration or damage in the device, discontinue its use.

## General cleaning instructions

Follow these instructions to clean the devices and other non-applied parts unless the other parts provide part-specific instructions. Non-applied parts refer to those parts of the system that are not in direct contact with the patient.

1. Turn off the power to the device.
2. Disconnect the device from the power supply.
3. Remove all cables.
4. Dampen a soft lint-free cloth with one of the permitted detergents.

5. Wring excess liquid from the cloth and wipe the exterior surface. Pay special attention to hard-to-clean areas, like grooves and crevices.
  - Remove any soil as soon as possible after use by wiping the device.
  - Any contact of cleaning solutions with metal parts may cause corrosion.
  - Do not damage or bend connector pins when cleaning or drying.
  - Do not let fluid pool around connection pins. If this happens, blot dry with a cotton swab or soft cloth.
6. Wipe off the cleaning solutions with a clean, lightly moistened cloth.
7. Visually ensure that the device is clean. If visible soil remains, repeat cleaning procedure until the device is thoroughly clean.
8. Dry thoroughly with a dry, lint-free cloth and let air dry for at least 30 minutes.  
Drying times may vary based on the environmental conditions.
9. Reconnect the device to the power supply.
10. Reconnect all cables.
11. Turn on the power to the device.

## Other manufacturer cleaning instructions

For details about cleaning and disinfection information for devices, device components, supplies, and accessories made by manufacturers other than GE, see the applicable instructions for use provided by the manufacturer.

## Disinfection

### Disinfection points to note

- Always clean before disinfecting.
- Always dilute cleaning and disinfectant agents according to their manufacturer's instructions. Always consider your hospital guidelines as well.
- Use only the permitted substances.
- Your hospital guidelines permitting, all cleaning and disinfection activities can be carried out at the bedside.
- Before drying a surface after wiping it, wait the minimum time required according to the substance manufacturer's instructions.
- Visually ensure that no substance residue remains on the device.

### Permitted disinfectants

About the following table:

- All third party trademarks are property of their respective owners.
- Trademark names and product availability may vary by country. Consult the column that lists ingredients to determine if an equivalent disinfectant is available in your country.

## CARESCAPE Central Station: Hardware series MAI700 and MAS700

| Disinfectant                                       | Manufacturer                  | Ingredients  | Type of disinfectant                 |
|--|-------------------------------|--|--------------------------------------|
| CaviWipes*   | Metrex Research, LLC.         | <ul style="list-style-type: none"> <li>Diisobutylphenoxyethoxyethyl dimethyl benzyl ammonium chloride - 0.28%</li> <li>Isopropanol 17.20%</li> <li>Ethylene Glycol Monobutyl Ether (2-Butoxyethanol) 1 to 5%</li> </ul>  | Quaternary ammonium and alcohol      |
| Cleanisept Wipes                                   | Dr. Schumacher GmbH           | <p>Cleanisept solution (7.5%) contains as active ingredients:</p> <ul style="list-style-type: none"> <li>Didecyldimethylammoniumchloride 0.25%</li> <li>Alkylbenzyldimethylammoniumchlorid 0.25%</li> <li>Alkylethylbenzyldimethylammoniumchloride 0.25%</li> </ul>                | Quaternary ammonium                  |
| Clinell Universal Sanitizing Wipes                 | GAMA Healthcare               | <ul style="list-style-type: none"> <li>Benzalkonium chloride &lt; 0.5%</li> <li>Didecyl dimethyl ammonium chloride &lt; 0.5%</li> <li>Polyhexamethylene biguanide (PHMB) &lt; 0.10%</li> </ul>   | Quaternary ammonium and bisbiguanide |
| Clinell Sporicidal Wipes                           | GAMA Healthcare               | <ul style="list-style-type: none"> <li>Sodium Percarbonate 40 to 50%</li> <li>Citric acid 5 to 10%</li> <li>Tetra acetyl ethylene diamine 10 to 35%</li> </ul>   | Hydrogen peroxide and peracetic acid |
| Clorox Hydrogen Peroxide Wipes*                    | Clorox Professional           | <ul style="list-style-type: none"> <li>Hydrogen Peroxide 1.4%</li> <li>Benzyl alcohol 1 to 5%</li> </ul>   | Hydrogen peroxide                    |
| Mikrozid Sensitive Wipes                           | Schülke & Mayr GmbH           | <ul style="list-style-type: none"> <li>Didecyldimethylammonium chloride 0.26%</li> <li>Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides 0.26%</li> <li>Quaternary ammonium compounds, C12-14-alkyl [(ethylphenyl)methyl] dimethyl, chlorides 0.26%</li> </ul> | Quaternary ammonium                  |
| PDI Sani-Cloth AF3 Germicidal Disposable Wipes*    | Professional Disposables Inc. | <ul style="list-style-type: none"> <li>n-Alkyl (68% C12, 32% C14) dimethyl ethylbenzyl ammonium chlorides 0.14%</li> <li>n-Alkyl (60% C14, 30% C16, 5% C12, 5% C18) dimethyl benzyl ammonium chlorides 0.14%</li> </ul> <p>Total of Quats: 0.28%</p>                               | Quaternary ammonium                  |
| PDI Sani-Cloth Bleach Germicidal Disposable Wipes* | Professional Disposables Inc. | <ul style="list-style-type: none"> <li>Sodium Hypochlorite 0.63%</li> </ul>  | Chlorine                             |

| Disinfectant                                      | Manufacturer                  | Ingredients   | Type of disinfectant                   |
|---|-------------------------------|---|--|
| PDI Sani-Cloth HB Germicidal Disposable Wipes*    | Professional Disposables Inc. | <ul style="list-style-type: none"> <li>Benzyl-C12-18-alkyldimethyl ammonium chlorides 0.07%</li> <li>Quaternary ammonium compounds, C12-14-alkyl [(ethylphenyl)methyl]dimethyl, chlorides 0.07%</li> </ul>  | Quaternary ammonium                    |
| PDI Sani-Cloth Plus*                              | Professional Disposables Inc. | <ul style="list-style-type: none"> <li>n-Alkyl (68% C12, 32% C14) dimethyl ethylbenzyl ammonium chlorides 0.125%</li> <li>n-Alkyl (60% C14, 30% C16, 5% C12, 5% C18) dimethyl benzyl ammonium chlorides 0.125%</li> <li>Isopropanol 14.85%</li> </ul> | Quaternary ammonium (contains alcohol) |
| PDI Super Sani-Cloth Germicidal Disposable Wipes* | Professional Disposables Inc. | <ul style="list-style-type: none"> <li>n-Alkyl (68% C12, 32% C14) dimethyl ethylbenzyl ammonium chlorides 0.25%</li> <li>n-Alkyl (60% C14, 30% C16, 5% C12, 5% C18) dimethyl benzyl ammonium chlorides 0.25%</li> <li>Isopropanol 55.00%</li> </ul>   | Quaternary ammonium and alcohol        |
| PDI Easy Screen Cleaning Wipes*                   | Professional Disposables Inc. | <ul style="list-style-type: none"> <li>Isopropyl alcohol 70%</li> </ul>   | Alcohol                                |
| Oxivir TB Wipes*                                  | Sealed Air                    | <ul style="list-style-type: none"> <li>Hydrogen peroxide 0.1 to 1.5%</li> <li>Benzyl alcohol 1 to 5%</li> </ul>   | Accelerated hydrogen peroxide          |
| Ethanol 70 to 96%                                 | Generic                       | <ul style="list-style-type: none"> <li>Ethanol</li> </ul>   | Alcohol                                |
| Isopropyl alcohol max. 60% by weight              | Generic                       | <ul style="list-style-type: none"> <li>Isopropyl alcohol</li> </ul>   | Alcohol                                |
| Bleach [dilute to max. of 0.65%]                  | Generic                       | <ul style="list-style-type: none"> <li>Sodium hypochlorite</li> </ul>   | Chlorine                               |

\* Available in the United States.

## Disinfecting external surfaces

The decision to disinfect must be made per the institution's requirements with an awareness of the effect on the integrity of the device. Do not use excessive drying techniques (e.g., oven, forced heat, sun drying).

1. Turn off the power to the device.
2. Disconnect the device from the power supply.
3. Remove all cables.
4. Dampen a soft lint-free cloth, or use disinfectant wipes with one of the permitted disinfectants.

5. Wring excess liquid from the cloth and wipe the exterior surface. Pay special attention to hard-to-clean areas, like grooves and crevices. Allow disinfecting solution to remain on device per disinfectant instructions or per hospital guidelines.
  - Any contact of disinfecting solutions with metal parts may cause corrosion.
  - Do not damage or bend connector pins when cleaning or drying.
  - Do not let fluid pool around connection pins. If this happens, blot dry with a cotton swab or soft cloth.
6. Wipe off the disinfecting solution with a clean, lightly moistened cloth.
7. Dry thoroughly with a dry, lint-free cloth and let air dry for at least 30 minutes.  
Drying times may vary based on the environmental conditions.
8. Reconnect the device to the power supply.
9. Reconnect all cables.
10. Turn on the power to the device.

# 6

## Patient Monitor B105/B125

### Cleaning and disinfection overview

The following cleaning and disinfection information applies to devices, device components, supplies, and accessories manufactured by GE.

The information provided in this chapter does not supersede any instructions for use provided by the manufacturer or provided with a device, device component, supply, or accessory.

For cleaning, disinfection, and care information for devices, device components, supplies, and accessories made by manufacturers other than GE, see the applicable instructions for use provided by the manufacturer.

## Cleaning

### Cleaning warnings

- |                |  |
|----------------|--|
| <b>WARNING</b> | Before cleaning or disinfecting, disconnect the device from the power supply.  |
| <b>WARNING</b> | Avoid using other chemicals than the ones described in this manual as they may damage device surfaces, labels, or cause equipment failures.                                  |
| <b>WARNING</b> | To prevent liquids from entering the monitor, do not tilt the monitor.   |
| <b>WARNING</b> | If liquid has accidentally entered the system or its parts, disconnect the power cord from the power supply and have the equipment serviced by authorized service personnel. |
| <b>WARNING</b> | Never immerse any part of the device, cables, or leadwires in liquids or allow liquid to enter the interior of the device.   |
| <b>WARNING</b> | Do not autoclave any part of the system with steam (including cables or leadwires) or sterilize with ethylene oxide.   |
| <b>WARNING</b> | Do not pour or spray any liquid directly on the device, cables, or leadwires or permit fluid to seep into connections or openings.   |

**WARNING** Never use conductive solutions, oxidizing compounds, wax, or wax compounds to clean devices, cables or leadwires.

## Cleaning cautions

**CAUTION** Do not apply pressurized air or gas to any outlet or tubing connected to the monitor. Pressure may destroy sensitive elements.

## Permitted detergents

The following permitted detergents can be used to clean the device and other non-applied parts unless there are separate part-specific instructions. Non-applied parts refer to those parts of the system that are not in direct contact with the patient.

- Water
- Enzymatic or neutral pH detergents

## Cleaning points to note

- Warranty does not cover any damages caused by using other than GE approved substances and methods.
- GE makes no claims as to the efficacy of the listed substances or methods to control infection.
- Always dilute cleaning and disinfectant agents according to their manufacturer's instructions. Always consider your hospital guidelines as well.
- Your hospital guidelines permitting, all cleaning and disinfection activities can be carried out at the bedside.
- Do not let liquid pool around connection pins. If this should happen, blot dry with a soft, lint-free cloth.
- Do not use excessive drying techniques, such as oven, forced heat, or sun drying.
- Do not spray cleaner directly on the display screen.
- Never connect any device or applied part to a patient until it is thoroughly dry.
- If you discover any signs of deterioration or damage in the device, discontinue its use.

## Cleaning instructions

### Locking the screen

You can set the touchscreen feature off when you need to clean the screen.

1. Select  >  **Lock**.
2. To enable the touchscreen, press any keypad key, or use the Trim Knob.

**NOTE**

Press the **On/Off** key to turn off the monitor.

## General cleaning instructions

Follow these instructions to clean the devices and other non-applied parts unless there are separate part-specific instructions. Non-applied parts refer to those parts of the system that are not in direct contact with the patient.

1. Turn off the power to the device.
2. Disconnect the device from the power supply.
3. Remove the recorder and E-module from monitor.
4. Remove all cables and battery.
5. Close battery door.
6. Dampen a soft lint-free cloth with one of the permitted detergents.
7. Wring excess liquid from the cloth and wipe the exterior surface. Pay special attention to hard to clean areas, like grooves and crevices.  
Any contact of cleaning solutions with metal parts may cause corrosion.  
Do not damage or bend connector pins when cleaning or drying.  
Do not let fluid pool around connection pins. If this happens, blot dry with a cotton swab or soft cloth.
8. Remove any soil as soon as possible after use by wiping the device.
9. Wipe off the cleaning solutions with a clean, lightly moistened cloth.  
Visually ensure that the device is clean. If visible soil remains, repeat cleaning procedure until the device is thoroughly clean.
10. Dry thoroughly with a dry, lint-free cloth and let air dry for at least 30 minutes.  
Drying times may vary based on the environmental conditions.
11. Insert battery and close the battery door.
12. Reconnect the device to the power supply.
13. Reconnect all cables.
14. Turn on the power to the device.

## Other manufacturer cleaning instructions

For details about cleaning and disinfecting information for devices, device components, supplies, and accessories made by manufacturers other than GE, see the applicable instructions for use provided by the manufacturer.

Do not reuse single-use disposable accessories.

## Disinfection

### Disinfection points to note

- Always clean before disinfecting.
- Always dilute cleaning and disinfectant agents according to their manufacturer's instructions. Always consider your hospital guidelines as well.
- Use only the permitted substances.

- Your hospital guidelines permitting, all cleaning and disinfection activities can be carried out at the bedside.
- Before drying a surface after wiping it, wait the minimum time required according to the substance manufacturer's instructions.
- Visually ensure that no substance residue remains on the equipment.

## Permitted disinfectants

About the following table:

- All third party trademarks are property of their respective owners.
- Trademark names and product availability may vary in different countries. Consult the column that lists ingredients to determine if an equivalent disinfectant is available in your country.

| Disinfectant                       | Manufacturer        | Ingredients  | Type of disinfectant                 |
|------------------------------------|---------------------|--|--------------------------------------|
| Cleanisept Wipes                   | Dr. Schumacher GmbH | Cleanisept solution (7.5%) contains as active ingredients: <ul style="list-style-type: none"> <li>• Didecyldimethylammoniumchloride 0.25%</li> <li>• Alkylbenzyldimethylammoniumchlorid 0.25%</li> <li>• Alkylethylbenzyldimethylammoniumchloride 0.25%</li> </ul> | Quaternary ammonium                  |
| Clinell Universal Sanitizing Wipes | GAMA Healthcare     | <ul style="list-style-type: none"> <li>• Benzalkonium chloride &lt;0.5%</li> <li>• Didecyldimethylammoniumchloride &lt;0.5%</li> <li>• Polyhexamethylene biguanide (PHMB) &lt;0.10%</li> </ul>   | Quaternary ammonium and bisbiguanide |
| Clinell Sporicidal Wipes           | GAMA Healthcare     | <ul style="list-style-type: none"> <li>• Sodium Percarbonate 40 to 50%</li> <li>• Citric acid 5 to 10%</li> <li>• Tetra acetyl ethylene diamine 10 to 35%</li> </ul>   | Hydrogen peroxide and peracetic acid |
| Clorox Hydrogen Peroxide Wipes*    | Clorox Professional | <ul style="list-style-type: none"> <li>• Hydrogen Peroxide 1.4%</li> <li>• Benzyl alcohol 1 to 5%</li> </ul>   | Hydrogen peroxide                    |

| Disinfectant                                       | Manufacturer                  | Ingredients  | Type of disinfectant                   |
|--|-------------------------------|--|--|
| Mikrozid Sensitive Wipes                           | Schülke & Mayr GmbH           | <ul style="list-style-type: none"> <li>Didecyldimethylammonium chloride 0.26%</li> <li>Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides 0.26%</li> <li>Quaternary ammonium compounds, C12-14-alkyl [(ethylphenyl)methyl] dimethyl, chlorides 0.26%</li> </ul> | Quaternary ammonium                    |
| PDI Sani-Cloth Bleach Germicidal Disposable Wipes* | Professional Disposables Inc. | <ul style="list-style-type: none"> <li>Sodium Hypochlorite 0.63%</li> </ul>  | Chlorine                               |
| PDI Sani-Cloth HB Germicidal Disposable Wipes*     | Professional Disposables Inc. | <ul style="list-style-type: none"> <li>Benzyl-C12-18-alkyldimethyl ammonium chlorides 0.07%</li> <li>Quaternary ammonium compounds, C12-14-alkyl [(ethylphenyl)methyl]dimethyl, chlorides 0.07%</li> </ul>   | Quaternary ammonium                    |
| PDI Sani-Cloth Plus*                               | Professional Disposables Inc. | <ul style="list-style-type: none"> <li>n-Alkyl (68% C12, 32% C14) dimethyl ethylbenzyl ammonium chlorides 0.125%</li> <li>n-Alkyl (60% C14, 30% C16, 5% C12, 5% C18) dimethyl benzyl ammonium chlorides 0.125%</li> <li>Isopropanol 14.85%</li> </ul>                              | Quaternary ammonium (contains alcohol) |
| PDI Super Sani-Cloth Germicidal Disposable Wipes*  | Professional Disposables Inc. | <ul style="list-style-type: none"> <li>n-Alkyl (68% C12, 32% C14) dimethyl ethylbenzyl ammonium chlorides 0.25%</li> <li>n-Alkyl (60% C14, 30% C16, 5% C12, 5% C18) dimethyl benzyl ammonium chlorides 0.25%</li> <li>Isopropanol 55.00%</li> </ul>                                | Quaternary ammonium and alcohol        |

| Disinfectant                                      | Manufacturer                  | Ingredients   | Type of disinfectant          |
|---|-------------------------------|---|-------------------------------|
| PDI Easy Screen Cleaning Wipes* <sup>1</sup>      | Professional Disposables Inc. | • Isopropyl alcohol 70%                                     | Alcohol                       |
| Oxivir TB Wipes*                                  | Sealed Air                    | • Hydrogen peroxide 0.1 to 1.5%<br>• Benzyl alcohol 1 to 5% | Accelerated hydrogen peroxide |
| Ethanol 70 to 96% <sup>1</sup>                    | Generic                       | • Ethanol   | Alcohol                       |
| Isopropyl alcohol max. 60% by weight <sup>1</sup> | Generic                       | • Isopropyl alcohol   | Alcohol                       |
| Bleach [dilute to max. of 0.65%]                  | Generic                       | • Sodium hypochlorite                                       | Chlorine                      |

\* Available in the United States.  
<sup>1</sup> NOTE: Do not use this disinfectant for touch screen panels.

## Disinfecting external surfaces

The decision to disinfect must be made per the institution's requirements with an awareness of the effect on the integrity of the device. Do not use excessive drying techniques (e.g., oven, forced heat, sun drying).

1. Turn off the power to the device.
2. Disconnect the device from the power supply.
3. Remove the recorder and E-module from monitor.
4. Remove all cables and battery.
5. Close battery door.
6. Dampen a soft lint-free cloth, or use disinfectant wipes with one of the permitted disinfectants.
7. Wring excess liquid from the cloth and wipe the exterior surface. Pay special attention to hard to clean areas, like grooves and crevices. Allow disinfecting solution to remain on device per disinfectant instructions or per hospital guidelines.
  - Any contact of disinfecting solutions with metal parts may cause corrosion.
  - Do not damage or bend any connector pins when cleaning or drying.
  - Do not let fluid pool around connection pins. If this happens, blot dry with a cotton swab or soft cloth.
8. Wipe off the disinfecting solution with a clean, lightly moistened cloth.
9. Dry thoroughly with a dry, lint-free cloth and let air dry for at least 30 minutes.  
 Drying times may vary based on the environmental conditions.
10. Reconnect the device to the power supply.
11. Reconnect all cables.
12. Turn on the power to the device.

# 7

## CARESCAPE B450 Monitor

### About cleaning and disinfection instructions

The following cleaning and disinfection care information applies to compatible devices, device components, supplies, and accessories manufactured by GE. You can check the compatibility from the supplemental information provided.

This information does not supersede any instructions for use provided by the manufacturer or provided with a device, device component, supply, or accessory.

For cleaning, disinfection, and care information for compatible devices, device components, supplies, and accessories made by manufacturers other than GE, see the applicable instructions for use provided by the manufacturer.

### Cleaning

#### Cleaning safety precautions

##### Cleaning warnings

- |                |  |
|----------------|--|
| <b>WARNING</b> | Before cleaning or disinfecting, disconnect the device from the power supply.  |
| <b>WARNING</b> | Avoid using other chemicals than the ones described in this manual as they may damage device surfaces, labels, or cause equipment failures.  |
| <b>WARNING</b> | To prevent liquids from entering the monitor or display casing, do not tilt the monitor or display more than +/-15 degrees. If the monitor is used as a stationary bedside monitor with CARESCAPE respiratory modules or PDM, do not tilt it at all. |
| <b>WARNING</b> | If liquid has accidentally entered the system or its parts, disconnect the power cord from the power supply and have the equipment serviced by qualified service personnel.  |
| <b>WARNING</b> | Cleanup and disposal of broken displays must be in compliance with the safety and waste control guidelines regulating this product.  |
| <b>WARNING</b> | Never immerse any part of the device, cables, or leadwires in liquids or allow liquid to enter the interior of the device.   |

|                |   |
|----------------|---|
| <b>WARNING</b> | Do not autoclave any part of the system with steam (including cables or leadwires) or sterilize with ethylene oxide or radiation. |
| <b>WARNING</b> | Do not pour or spray any liquid so that it may seep into connections or openings.   |
| <b>WARNING</b> | Never use conductive solutions, oxidizing compounds, wax, or wax compounds to clean devices, cables or leadwires.                 |

## Cleaning cautions

|                |  |
|----------------|--|
| <b>CAUTION</b> | Do not apply pressurized air or gas to any outlet or tubing connected to the monitor. Pressure may destroy sensitive elements. |
|----------------|--|

## Permitted detergents

- Water
- Ethanol 70 to 96% by volume
- Isopropyl alcohol max. 60% by weight
- Enzymatic or neutral pH detergents

## Cleaning points to note

- Warranty does not cover any damages caused by using other than GE approved substances and methods.
- GE makes no claims as to the efficacy of the listed substances or methods to control infection.
- Your hospital guidelines permitting, all cleaning and disinfection activities can be carried out at the bedside.
- Do not let liquid pool around connection pins. If this should happen, blot dry with a soft, lint-free cloth.
- Do not use excessive drying techniques, such as oven, forced heat, or sun drying.
- Do not spray cleaner directly on the display screen.
- Never connect any device or applied part to a patient until it is thoroughly dry.
- If you discover any signs of deterioration or damage in the device, discontinue its use.

## Setting the touchscreen off for cleaning

You can set the touchscreen feature off for 30 seconds at a time when you need to clean the screen. The countdown timer appears on the screen.

1. Select **Monitor Setup > Main Setup**.
2. Select **Touchscreen Off**.
3. You can enable the touchscreen immediately by pressing any monitor hardkey or the Trim Knob, or by selecting **Cancel** in the **Touchscreen Off** display.

## Cleaning non-applied parts, general instructions

Follow these instructions to clean the monitor, modules, EEG headbox, and other non-applied parts unless there are separate part-specific instructions. Non-applied parts refer to those parts of the system that are not in direct contact with the patient.

Be especially careful when cleaning the display or monitor screen. They are more sensitive to rough cleaning methods than for example the monitor housing.

1. Turn off the power to the equipment.
2. Disconnect the equipment from the power supply.
3. Remove all cables and batteries (if applicable) and close battery door(s).
4. Dampen a soft lint-free cloth with one of the permitted detergents.
5. Wring excess liquid from the cloth and wipe the exterior surface. Pay special attention to hard to clean areas, like grooves and crevices.

Any contact of cleaning or disinfecting solutions with metal parts may cause corrosion.

Do not damage or bend connector pins when cleaning or drying.

6. Remove any soil as soon as possible after use by wiping the device.  
Do not let fluid pool around connection pins. If this happens, blot dry with a cotton swab or soft cloth.
7. Wipe off the cleaning solutions with a clean, lightly moistened cloth.
8. Dry thoroughly with a dry, lint-free cloth and let air dry for at least 30 minutes.  
Drying times may vary based on the environmental conditions.
9. Visually ensure that the device is clean. If visible soil remains, repeat cleaning procedure until the device is thoroughly clean.
10. Insert batteries (if applicable) and close battery doors.
11. Reconnect the equipment to the power supply.
12. Turn on the power to the equipment.

## Other devices' cleaning instructions

For details about cleaning the accessories, see the instructions for use in the accessory package.

Do not reuse single-use disposable accessories.

Refer to the user documentation provided with the keyboard, mouse, and barcode reader for instructions on how to clean them. Always consider your hospital guidelines as well.

## Disinfection

### Disinfection points to note

- Always clean before disinfecting.

- Always dilute cleaning and disinfectant agents according to their manufacturer's instructions. Always consider your hospital guidelines as well.
- Use only the permitted substances.
- Your hospital guidelines permitting, all cleaning and disinfection activities can be carried out at the bedside.
- Before drying a surface after wiping it, wait the minimum time required according to the substance manufacturer's instructions.
- Visually ensure that no substance residue remains on the equipment.

## Permitted disinfectants

About the following table:

- All third party trademarks are property of their respective owners.
- Trademark names and product availability may vary in different countries. Consult the column that lists ingredients to determine if an equivalent disinfectant is available in your country.

| Disinfectant   | Ingredients, if applicable. Listed as indicated in the disinfectant package or Material Safety Data Sheet at the time of publishing this manual.   |
|--|--|
| Ethanol 70 to 96%  | Alcohol  |
| PDI Easy Screen Cleaning   | <ul style="list-style-type: none"> <li>• Isopropanol 60 to 70%</li> <li>• Water 30 to 40%</li> </ul>   |
| PDI Super Sani-Cloth   | <ul style="list-style-type: none"> <li>• n-Alkyl (68% C12, 32% C14) dimethyl ethylbenzyl ammonium chlorides 0.25%</li> <li>• n-Alkyl (60% C14, 30% C16, 5% C12, 5% C18) dimethyl benzyl ammonium chlorides 0.25%</li> <li>• Isopropanol 55.0%</li> </ul> |
| Oxivir TB Wipes  | <ul style="list-style-type: none"> <li>• Hydrogen peroxide 0.1 to 1.5%</li> <li>• Benzyl alcohol 1 to 5%</li> </ul>  |
| Clinell Sporicidal Wipes   | <ul style="list-style-type: none"> <li>• Sodium Percarbonate 40 to 50%</li> <li>• Citric acid 5 to 10%</li> <li>• Tetra acetyl ethylene diamine 10 to 35%</li> <li>• Other components</li> </ul>   |
| Clorox Healthcare Hydrogen Peroxide Cleaner Disinfectant Wipes   | <ul style="list-style-type: none"> <li>• Hydrogen Peroxide 1.4%</li> <li>• Benzyl Alcohol 1 to 5%</li> </ul>   |
| Glutaraldehyde (max. 2% by volume)   |  |
| Phenol (max. 2% by volume)   |  |
| Sodium hypochlorite (max. 5.25% by volume mixed with H <sub>2</sub> O in ratio of 1:10). Do not use this disinfectant for touch screen panels. |  |

## Disinfection and sterilization of accessories

For details about disinfecting and sterilizing the accessories, see the instructions for use in the accessory package.



# 8

## CARESCAPE B650 Monitor

### About cleaning and disinfection instructions

The following cleaning and disinfection information applies to compatible devices, device components, supplies, and accessories manufactured by GE. You can check the compatibility from the supplemental information provided.

This information does not supersede any instructions for use provided by the manufacturer or provided with a device, device component, supply, or accessory.

For cleaning, disinfection, and care information for compatible devices, device components, supplies, and accessories made by manufacturers other than GE, see the applicable instructions for use provided by the manufacturer.

## Cleaning

### Cleaning safety precautions

#### Cleaning warnings

- |                |  |
|----------------|--|
| <b>WARNING</b> | Before cleaning or disinfecting, disconnect the device from the power supply.  |
| <b>WARNING</b> | Avoid using other chemicals than the ones described in this manual as they may damage device surfaces, labels, or cause equipment failures.  |
| <b>WARNING</b> | To prevent liquids from entering the monitor or display casing, do not tilt the monitor or display more than +/-15 degrees. If the monitor is used as a stationary bedside monitor with CARESCAPE respiratory modules or PDM, do not tilt it at all. |
| <b>WARNING</b> | If liquid has accidentally entered the system or its parts, disconnect the power cord from the power supply and have the equipment serviced by qualified service personnel.  |
| <b>WARNING</b> | Cleanup and disposal of broken displays must be in compliance with the safety and waste control guidelines regulating this product.  |
| <b>WARNING</b> | Never immerse any part of the device, cables, or leadwires in liquids or allow liquid to enter the interior of the device.   |

|                |   |
|----------------|---|
| <b>WARNING</b> | Do not autoclave any part of the system with steam (including cables or leadwires) or sterilize with ethylene oxide or radiation. |
| <b>WARNING</b> | Do not pour or spray any liquid so that it may seep into connections or openings.   |
| <b>WARNING</b> | Never use conductive solutions, oxidizing compounds, wax, or wax compounds to clean devices, cables or leadwires.                 |

## Cleaning cautions

|                |  |
|----------------|--|
| <b>CAUTION</b> | Do not apply pressurized air or gas to any outlet or tubing connected to the monitor. Pressure may destroy sensitive elements. |
|----------------|--|

## Permitted detergents

- Water
- Ethanol 70 to 96% by volume
- Isopropyl alcohol max. 60% by weight
- Enzymatic or neutral pH detergents

## Cleaning points to note

- Warranty does not cover any damages caused by using other than GE approved substances and methods.
- GE makes no claims as to the efficacy of the listed substances or methods to control infection.
- Your hospital guidelines permitting, all cleaning and disinfection activities can be carried out at the bedside.
- Do not let liquid pool around connection pins. If this should happen, blot dry with a soft, lint-free cloth.
- Do not use excessive drying techniques, such as oven, forced heat, or sun drying.
- Do not spray cleaner directly on the display screen.
- Never connect any device or applied part to a patient until it is thoroughly dry.
- If you discover any signs of deterioration or damage in the device, discontinue its use.

## Setting the touchscreen off for cleaning

You can set the touchscreen feature off for 30 seconds at a time when you need to clean the screen. The countdown timer appears on the screen.

1. Select **Monitor Setup > Main Setup**.
2. Select **Touchscreen Off**.
3. You can enable the touchscreen immediately by pressing any monitor hardkey or the Trim Knob, or by selecting **Cancel** in the **Touchscreen Off** display.

## Cleaning non-applied parts, general instructions

Follow these instructions to clean the monitor, modules, EEG headbox, and other non-applied parts unless there are separate part-specific instructions. Non-applied parts refer to those parts of the system that are not in direct contact with the patient.

Be especially careful when cleaning the display or monitor screen. They are more sensitive to rough cleaning methods than for example the monitor housing.

1. Turn off the power to the equipment.
2. Disconnect the equipment from the power supply.
3. Remove all cables and batteries (if applicable) and close battery door(s).
4. Dampen a soft lint-free cloth with one of the permitted detergents.
5. Wring excess liquid from the cloth and wipe the exterior surface. Pay special attention to hard to clean areas, like grooves and crevices.

Any contact of cleaning or disinfecting solutions with metal parts may cause corrosion.

Do not damage or bend connector pins when cleaning or drying.

6. Remove any soil as soon as possible after use by wiping the device.  
Do not let fluid pool around connection pins. If this happens, blot dry with a cotton swab or soft cloth.
7. Wipe off the cleaning solutions with a clean, lightly moistened cloth.
8. Dry thoroughly with a dry, lint-free cloth and let air dry for at least 30 minutes.  
Drying times may vary based on the environmental conditions.
9. Visually ensure that the device is clean. If visible soil remains, repeat cleaning procedure until the device is thoroughly clean.
10. Insert batteries (if applicable) and close battery doors.
11. Reconnect the equipment to the power supply.
12. Turn on the power to the equipment.

## Other devices' cleaning instructions

For details about cleaning the accessories, see the instructions for use in the accessory package.

Do not reuse single-use disposable accessories.

Refer to the user documentation provided with the keyboard, mouse, and barcode reader for instructions on how to clean them. Always consider your hospital guidelines as well.

## Disinfection

### Disinfection points to note

- Always clean before disinfecting.

- Always dilute cleaning and disinfectant agents according to their manufacturer's instructions. Always consider your hospital guidelines as well.
- Use only the permitted substances.
- Your hospital guidelines permitting, all cleaning and disinfection activities can be carried out at the bedside.
- Before drying a surface after wiping it, wait the minimum time required according to the substance manufacturer's instructions.
- Visually ensure that no substance residue remains on the equipment.

## Permitted disinfectants

About the following table:

- All third party trademarks are property of their respective owners.
- Trademark names and product availability may vary in different countries. Consult the column that lists ingredients to determine if an equivalent disinfectant is available in your country.

| Disinfectant  | Ingredients, if applicable. Listed as indicated in the disinfectant package or Material Safety Data Sheet at the time of publishing this manual.  |
|---|---|
| Ethanol 70 to 96%   | Alcohol   |
| PDI Easy Screen Cleaning  | <ul style="list-style-type: none"> <li>• Isopropanol 60 to 70%</li> <li>• Water 30 to 40%</li> </ul>  |
| PDI Super Sani-Cloth  | <ul style="list-style-type: none"> <li>• n-Alkyl (68% C12, 32%C14) dimethyl ethylbenzyl ammonium chlorides 0.25%</li> <li>• n-Alkyl (60% C14, 30% C16, 5% C12, 5% C18) dimethyl benzyl ammonium chlorides 0.25%</li> <li>• Isopropanol 55.0%</li> </ul> |
| Oxivir TB Wipes   | <ul style="list-style-type: none"> <li>• Hydrogen peroxide 0.1 to 1.5%</li> <li>• Benzyl alcohol 1 to 5%</li> </ul>   |
| Clinell Sporicidal Wipes  | <ul style="list-style-type: none"> <li>• Sodium Percarbonate 40 to 50%</li> <li>• Citric acid 5 to 10%</li> <li>• Tetra acetyl ethylene diamine 10 to 35%</li> <li>• Other components</li> </ul>  |
| Clorox Healthcare Hydrogen Peroxide Cleaner Disinfectant Wipes  | <ul style="list-style-type: none"> <li>• Hydrogen Peroxide 1.4%</li> <li>• Benzyl Alcohol 1 to 5%</li> </ul>  |
| Glutaraldehyde (max. 2% by volume)  |   |
| Phenol (max. 2% by volume)  |   |
| Sodium hypochlorite (max. 5.25% by volume mixed with H <sub>2</sub> O in ratio of 1:10). Do not use this disinfectant for touchscreen panels. |   |

## Disinfection and sterilization of accessories

For details about disinfecting and sterilizing the accessories, see the instructions for use in the accessory package.



# 9

## CARESCAPE B850 Monitor

### About cleaning and disinfection instructions

The following cleaning and disinfection information applies to compatible devices, device components, supplies, and accessories manufactured by GE. You can check the compatibility from the supplemental information provided.

This information does not supersede any instructions for use provided by the manufacturer or provided with a device, device component, supply, or accessory.

For cleaning, disinfection, and care information for compatible devices, device components, supplies, and accessories made by manufacturers other than GE, see the applicable instructions for use provided by the manufacturer.

## Cleaning

### Cleaning safety precautions

#### Cleaning warnings

- |                |   |
|----------------|---|
| <b>WARNING</b> | Before cleaning or disinfecting, disconnect the device from the power supply.   |
| <b>WARNING</b> | Avoid using other chemicals than the ones described in this manual as they may damage device surfaces, labels, or cause equipment failures.                                 |
| <b>WARNING</b> | To prevent liquids from entering the monitor or display casing, do not tilt the monitor or display more than +/-15 degrees.   |
| <b>WARNING</b> | If liquid has accidentally entered the system or its parts, disconnect the power cord from the power supply and have the equipment serviced by qualified service personnel. |
| <b>WARNING</b> | Cleanup and disposal of broken displays must be in compliance with the safety and waste control guidelines regulating this product.   |
| <b>WARNING</b> | Never immerse any part of the device, cables, or leadwires in liquids or allow liquid to enter the interior of the device.  |

|                |   |
|----------------|---|
| <b>WARNING</b> | Do not autoclave any part of the system with steam (including cables or leadwires) or sterilize with ethylene oxide or radiation. |
| <b>WARNING</b> | Do not pour or spray any liquid so that it may seep into connections or openings.   |
| <b>WARNING</b> | Never use conductive solutions, oxidizing compounds, wax, or wax compounds to clean devices, cables or leadwires.                 |

## Cleaning cautions

|                |  |
|----------------|--|
| <b>CAUTION</b> | Do not apply pressurized air or gas to any outlet or tubing connected to the monitor. Pressure may destroy sensitive elements. |
|----------------|--|

## Permitted detergents

- Water
- Ethanol 70 to 96% by volume
- Isopropyl alcohol max. 60% by weight
- Enzymatic or neutral pH detergents

## Cleaning points to note

- Warranty does not cover any damages caused by using other than GE approved substances and methods.
- GE makes no claims as to the efficacy of the listed substances or methods to control infection.
- Your hospital guidelines permitting, all cleaning and disinfection activities can be carried out at the bedside.
- Do not let liquid pool around connection pins. If this should happen, blot dry with a soft, lint-free cloth.
- Do not use excessive drying techniques, such as oven, forced heat, or sun drying.
- Do not spray cleaner directly on the display screen.
- Never connect any device or applied part to a patient until it is thoroughly dry.
- If you discover any signs of deterioration or damage in the device, discontinue its use.

## Setting the touchscreen off for cleaning

You can set the touchscreen feature off for 30 seconds at a time when you need to clean the screen. The countdown timer appears on the screen.

1. Select **Monitor Setup > Main Setup**.
2. Select **Touchscreen Off**.
3. You can enable the touchscreen immediately by pressing any monitor hardkey or the Trim Knob, or by selecting **Cancel** in the **Touchscreen Off** display.

## Cleaning non-applied parts, general instructions

Follow these instructions to clean the monitor, modules, EEG headbox, and other non-applied parts unless there are separate part-specific instructions. Non-applied parts refer to those parts of the system that are not in direct contact with the patient.

Be especially careful when cleaning the display screen. They are more sensitive to rough cleaning methods than for example the monitor housing.

1. Turn off the power to the equipment.
2. Disconnect the equipment from the power supply.
3. Remove all cables.
4. Dampen a soft lint-free cloth with one of the permitted detergents.
5. Wring excess liquid from the cloth and wipe the exterior surface. Pay special attention to hard to clean areas, like grooves and crevices.  
Any contact of cleaning or disinfecting solutions with metal parts may cause corrosion.  
Do not damage or bend connector pins when cleaning or drying.
6. Remove any soil as soon as possible after use by wiping the device.  
Do not let fluid pool around connection pins. If this happens, blot dry with a cotton swab or soft cloth.
7. Wipe off the cleaning solutions with a clean, lightly moistened cloth.
8. Dry thoroughly with a dry, lint-free cloth and let air dry for at least 30 minutes.  
Drying times may vary based on the environmental conditions.
9. Visually ensure that the device is clean. If visible soil remains, repeat cleaning procedure until the device is thoroughly clean.
10. Reconnect the equipment to the power supply.
11. Turn on the power to the equipment.

## Other devices' cleaning instructions

For details about cleaning the accessories, see the instructions for use in the accessory package.

Do not reuse single-use disposable accessories.

Refer to the user documentation provided with the keyboard, mouse, and barcode reader for instructions on how to clean them. Always consider your hospital guidelines as well.

## Disinfection

### Disinfection points to note

- Always clean before disinfecting.
- Always dilute cleaning and disinfectant agents according to their manufacturer's instructions. Always consider your hospital guidelines as well.
- Use only the permitted substances.

- Your hospital guidelines permitting, all cleaning and disinfection activities can be carried out at the bedside.
- Before drying a surface after wiping it, wait the minimum time required according to the substance manufacturer's instructions.
- Visually ensure that no substance residue remains on the equipment.

## Permitted disinfectants

About the following table:

- All third party trademarks are property of their respective owners.
- Trademark names and product availability may vary in different countries. Consult the column that lists ingredients to determine if an equivalent disinfectant is available in your country.

| Disinfectant  | Ingredients, if applicable. Listed as indicated in the disinfectant package or Material Safety Data Sheet at the time of publishing this manual.  |
|---|---|
| Ethanol 70 to 96%   | Alcohol   |
| PDI Easy Screen Cleaning  | <ul style="list-style-type: none"> <li>• Isopropanol 60 to 70%</li> <li>• Water 30 to 40%</li> </ul>  |
| PDI Super Sani-Cloth  | <ul style="list-style-type: none"> <li>• n-Alkyl (68% C12, 32%C14) dimethyl ethylbenzyl ammonium chlorides 0.25%</li> <li>• n-Alkyl (60% C14, 30% C16, 5% C12, 5% C18) dimethyl benzyl ammonium chlorides 0.25%</li> <li>• Isopropanol 55.0%</li> </ul> |
| Oxivir TB Wipes   | <ul style="list-style-type: none"> <li>• Hydrogen peroxide 0.1 to 1.5%</li> <li>• Benzyl alcohol 1 to 5%</li> </ul>   |
| Clinell Sporicidal Wipes  | <ul style="list-style-type: none"> <li>• Sodium Percarbonate 40 to 50%</li> <li>• Citric acid 5 to 10%</li> <li>• Tetra acetyl ethylene diamine 10 to 35%</li> <li>• Other components</li> </ul>  |
| Clorox Healthcare Hydrogen Peroxide Cleaner Disinfectant Wipes  | <ul style="list-style-type: none"> <li>• Hydrogen Peroxide 1.4%</li> <li>• Benzyl Alcohol 1 to 5%</li> </ul>  |
| Glutaraldehyde (max. 2% by volume)  |   |
| Phenol (max. 2% by volume)  |   |
| Sodium hypochlorite (max. 5.25% by volume mixed with H <sub>2</sub> O in ratio of 1:10). Do not use this disinfectant for touchscreen panels. |   |

## Disinfection and sterilization of accessories

For details about disinfecting and sterilizing the accessories, see the instructions for use in the accessory package.

# 10

## Unity Network ID Interface Device

### Cleaning and disinfection overview

The following cleaning and disinfection information applies to devices, device components, supplies, and accessories manufactured by GE.

The information provided in this chapter does not supersede any instructions for use provided by the manufacturer or provided with a device, device component, supply, or accessory.

For cleaning, disinfection, and care information for devices, device components, supplies, and accessories made by manufacturers other than GE, see the applicable instructions for use provided by the manufacturer.

## Cleaning

### Cleaning safety precautions

#### Cleaning warnings

- |                |   |
|----------------|---|
| <b>WARNING</b> | Avoid using other chemicals than the ones described in this manual as they may damage device surfaces, labels, or cause equipment failures.                                 |
| <b>WARNING</b> | If liquid has accidentally entered the system or its parts, disconnect the power cord from the power supply and have the equipment serviced by qualified service personnel. |
| <b>WARNING</b> | Never immerse any part of the device or cables in liquids or allow liquid to enter the interior of the device.  |
| <b>WARNING</b> | Do not autoclave any part of the system with steam (including cables) or sterilize with ethylene oxide.   |
| <b>WARNING</b> | Do not pour or spray any liquid so that it may seep into connections or openings.   |
| <b>WARNING</b> | Never use conductive solutions, oxidizing compounds, wax, or wax compounds to clean devices or cables.  |

## Cleaning cautions

### CAUTION

Do not apply pressurized air or gas to any outlet or tubing connected to the monitor. Pressure may destroy sensitive elements.

## Permitted detergents

- Water
- Enzymatic or neutral pH detergents

## Cleaning points to note

- Warranty does not cover any damages caused by using other than GE approved substances and methods.
- GE makes no claims as to the efficacy of the listed substances or methods to control infection.
- Your hospital guidelines permitting, all cleaning and disinfection activities can be carried out at the bedside.
- Do not let liquid pool around connection pins. If this should happen, blot dry with a soft, lint-free cloth.
- Do not use excessive drying techniques, such as oven, forced heat, or sun drying.
- Never connect any device or applied part to a patient until it is thoroughly dry.
- If you discover any signs of deterioration or damage in the device, discontinue its use.

## General cleaning instructions

Follow these instructions to clean the device and other non-applied parts unless the other parts provide part-specific instructions. Non-applied parts refer to those parts of the system that are not in direct contact with the patient.

1. Turn off the power to the equipment.
2. Disconnect the equipment from the power supply.
3. Remove all cables.
4. Dampen a soft lint-free cloth with one of the permitted detergents.
5. Wring excess liquid from the cloth and wipe the exterior surface. Pay special attention to hard to clean areas, like grooves and crevices.  
Any contact of cleaning or disinfecting solutions with metal parts may cause corrosion.  
Do not damage or bend connector pins when cleaning or drying.
6. Remove any soil as soon as possible after use by wiping the device.  
Do not let fluid pool around connection pins. If this happens, blot dry with a cotton swab or soft cloth.
7. Wipe off the cleaning solutions with a clean, lightly moistened cloth.
8. Dry thoroughly with a dry, lint-free cloth and let air dry for at least 30 minutes.  
Drying times may vary based on the environmental conditions.

9. Visually ensure that the device is clean. If visible soil remains, repeat cleaning procedure until the device is thoroughly clean.
10. Reconnect the equipment to the power supply.
11. Reconnect all cables.
12. Turn on the power to the equipment.

## Other manufacturer cleaning instructions

The information provided in this chapter does not supersede any instructions for use provided by the manufacturer or provided with a device, device component, supply, or accessory.

For cleaning, disinfection, and care information for devices, device components, supplies, and accessories made by manufacturers other than GE, see the applicable instructions for use provided by the manufacturer.

## Disinfection

### Disinfection safety precautions

#### Disinfection cautions

|                |  |
|----------------|--|
| <b>CAUTION</b> | IMMERSION. Never immerse Unity Network ID interface device components in cleaning fluids or disinfecting agents. |
|----------------|--|

#### Disinfection notices

|               |   |
|---------------|---|
| <b>NOTICE</b> | COLOR SHIFT. Some plastics may experience as light change in color over time due to effects of disinfecting agents. This effect is cosmetic and not associated with product safety or normal function.  |
| <b>NOTICE</b> | SPOTTING, STAINING, CORROSION. Metal components including fasteners may corrode or become stained or spotted in appearance from continuous exposure to chlorine compounds like bleach. These effects are not associated with product safety or normal function. |

### Disinfection points to note

- Always clean before disinfecting.
- Always dilute cleaning and disinfectant agents according to their manufacturer's instructions. Always consider your hospital guidelines as well.
- Use only the permitted substances.
- Your hospital guidelines permitting, all cleaning and disinfection activities can be carried out at the bedside.
- Before drying a surface after wiping it, wait the minimum time required according to the substance manufacturer's instructions.
- Visually ensure that no substance residue remains on the equipment.

## Permitted disinfectants

About the following table:

- All third party trademarks are property of their respective owners.
- Trademark names and product availability may vary in different countries. Consult the column that lists ingredients to determine if an equivalent disinfectant is available in your country.

| Disinfectant                       | Manufacturer          | Ingredients   | Type of disinfectant                 |
|------------------------------------|-----------------------|---|--------------------------------------|
| CAVIWIPES*                         | Metrex Research, LLC. | <ul style="list-style-type: none"> <li>• Diisobutylphenoxyethoxyethyl dimethyl benzyl ammonium chloride - 0.28%</li> <li>• Isopropanol 17.20%</li> <li>• Ethylene Glycol Monobutyl Ether (2-Butoxyethanol) 1 to 5%</li> </ul>   | Quaternary ammonium and alcohol      |
| Cleanisept Wipes                   | Dr. Schumacher GmbH   | <p>Cleanisept solution (7.5%) contains as active ingredients:</p> <ul style="list-style-type: none"> <li>• Didecyldimethylammoniumchloride 0.25%</li> <li>• Alkylbenzyldimethylammoniumchlorid 0.25%</li> <li>• Alkylethylbenzyldimethylammoniumchloride 0.25%</li> </ul> | Quaternary ammonium                  |
| Clinell Universal Sanitizing Wipes | GAMA Healthcare       | <ul style="list-style-type: none"> <li>• Benzalkonium chloride &lt; 0.5%</li> <li>• Didecyl dimethyl ammonium chloride &lt; 0.5%</li> <li>• Polyhexamethylene biguanide (PHMB) &lt; 0.10%</li> </ul>  | Quaternary ammonium and bisbiguanide |
| Clinell Sporicidal Wipes           | GAMA Healthcare       | <ul style="list-style-type: none"> <li>• Sodium Percarbonate 40 to 50%</li> <li>• Citric acid 5 to 10%</li> <li>• Tetra acetyl ethylene diamine 10 to 35%</li> </ul>  | Hydrogen peroxide and peracetic acid |
| Clorox Hydrogen Peroxide Wipes*    | Clorox Professional   | <ul style="list-style-type: none"> <li>• Hydrogen Peroxide 1.4%</li> <li>• Benzyl alcohol 1 to 5%</li> </ul>  | Hydrogen peroxide                    |

| Disinfectant                                       | Manufacturer                  | Ingredients  | Type of disinfectant |
|--|-------------------------------|--|----------------------|
| Mikrozid Sensitive Wipes                           | Schülke & Mayr GmbH           | <ul style="list-style-type: none"> <li>Didecyldimethylammonium chloride 0.26%</li> <li>Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides 0.26%</li> <li>Quaternary ammonium compounds, C12-14-alkyl [(ethylphenyl)methyl] dimethyl, chlorides 0.26%</li> </ul> | Quaternary ammonium  |
| PDI Sani-Cloth AF3 Germicidal Disposable Wipes*    | Professional Disposables Inc. | <ul style="list-style-type: none"> <li>n-Alkyl (68% C12, 32% C14) dimethyl ethylbenzyl ammonium chlorides 0.14%</li> <li>n-Alkyl (60% C14, 30% C16, 5% C12, 5% C18) dimethyl benzyl ammonium chlorides 0.14%</li> </ul> <p>Total of Quats: 0.28%</p>                               | Quaternary ammonium  |
| PDI Sani-Cloth Bleach Germicidal Disposable Wipes* | Professional Disposables Inc. | <ul style="list-style-type: none"> <li>Sodium Hypochlorite 0.63%</li> </ul>  | Chlorine             |
| PDI Sani-Cloth HB Germicidal Disposable Wipes*     | Professional Disposables Inc. | <ul style="list-style-type: none"> <li>Benzyl-C12-18-alkyldimethyl ammonium chlorides 0.07%</li> <li>Quaternary ammonium compounds, C12-14-alkyl [(ethylphenyl)methyl] dimethyl, chlorides 0.07%</li> </ul>  | Quaternary ammonium  |

| Disinfectant                                      | Manufacturer                  | Ingredients   | Type of disinfectant                   |
|---|-------------------------------|---|--|
| PDI Sani-Cloth Plus*                              | Professional Disposables Inc. | <ul style="list-style-type: none"> <li>• n-Alkyl (68% C12, 32% C14) dimethyl ethylbenzyl ammonium chlorides 0.125%</li> <li>• n-Alkyl (60% C14, 30% C16, 5% C12, 5% C18) dimethyl benzyl ammonium chlorides 0.125%</li> <li>• Isopropanol 14.85%</li> </ul> | Quaternary ammonium (contains alcohol) |
| PDI Super Sani-Cloth Germicidal Disposable Wipes* | Professional Disposables Inc. | <ul style="list-style-type: none"> <li>• n-Alkyl (68% C12, 32% C14) dimethyl ethylbenzyl ammonium chlorides 0.25%</li> <li>• n-Alkyl (60% C14, 30% C16, 5% C12, 5% C18) dimethyl benzyl ammonium chlorides 0.25%</li> <li>• Isopropanol 55.00%</li> </ul>   | Quaternary ammonium and alcohol        |
| PDI Easy Screen Cleaning Wipes*                   | Professional Disposables Inc. | <ul style="list-style-type: none"> <li>• Isopropyl alcohol 70%</li> </ul>   | Alcohol                                |
| Oxivir TB Wipes*                                  | Sealed Air                    | <ul style="list-style-type: none"> <li>• Hydrogen peroxide 0.1 to 1.5%</li> <li>• Benzyl alcohol 1 to 5%</li> </ul>   | Accelerated hydrogen peroxide          |
| Ethanol 70% to 96%                                | Generic                       | <ul style="list-style-type: none"> <li>• Ethanol</li> </ul>   | Alcohol                                |
| Isopropyl alcohol max. 60% by weight              | Generic                       | <ul style="list-style-type: none"> <li>• Isopropyl alcohol</li> </ul>   | Alcohol                                |
| Bleach [dilute to max of 0.65%]                   | Generic                       | <ul style="list-style-type: none"> <li>• Sodium Hypochlorite</li> </ul>   | Chlorine                               |

\* Available in the United States.

## Disinfection and sterilization of accessories

For details about disinfecting and sterilizing the accessories, see the instructions for use in the accessory package.

# 11

## PRN 50M+

### Cleaning and disinfection overview

The following cleaning and disinfection information applies to the PRN 50M+.

The information provided in this chapter does not supersede any instructions for use provided by the manufacturer or provided with the device.

For cleaning, disinfection, and care information for accessories made by other manufacturers, see the applicable instructions for use provided by the manufacturer.

## Cleaning

### Cleaning warnings

|                |  |
|----------------|--|
| <b>WARNING</b> | Avoid using chemicals other than the ones described in this document, as they may damage device surfaces or labels, or cause equipment failures.   |
| <b>WARNING</b> | If liquid has accidentally entered the system or its parts, disconnect the power cord from the power supply, remove the battery, and have the equipment serviced by qualified service personnel. |
| <b>WARNING</b> | Never immerse any part of the device, cables, or leadwires in liquids or allow liquid to enter the interior of the device.   |
| <b>WARNING</b> | Do not autoclave any part of the system with steam or sterilize with ethylene oxide.   |
| <b>WARNING</b> | Do not pour or spray any liquid so that it may seep into connections or openings.  |
| <b>WARNING</b> | Never use conductive solutions, oxidizing compounds, wax, or wax compounds to clean device.  |

### Permitted detergents

- Water
- Enzymatic or neutral pH detergents

## Cleaning points to note

- Warranty does not cover any damages caused by using substances or methods.
- Manufacturer makes no claims as to the efficacy of the listed substances or methods to control infection.
- Always dilute cleaning and disinfectant agents according to their manufacturer's instructions. Always consider your hospital guidelines as well.
- Your hospital guidelines permitting, all cleaning and disinfection activities can be carried out at the bedside.
- Do not let liquid pool around connection pins. If this should happen, blot dry with a soft, lint-free cloth.
- Do not use excessive drying techniques, such as oven, forced heat, or sun drying.
- Never connect any device until it is thoroughly dry.
- If you discover any signs of deterioration or damage in the device, discontinue its use.

## General cleaning instructions

Follow these instructions to clean the device.

1. Turn off the power to the device.
2. Disconnect the device from the power supply.
3. Remove all cables.
4. Dampen a soft lint-free cloth with one of the permitted detergents.
5. Wring excess liquid from the cloth and wipe the exterior surface. Pay special attention to hard-to-clean areas, like grooves and crevices.
  - Remove any soil as soon as possible after use by wiping the device.
  - Any contact of cleaning solutions with metal parts may cause corrosion.
  - Do not damage or bend connector pins when cleaning or drying.
  - Do not let fluid pool around connection pins. If this happens, blot dry with a cotton swab or soft cloth.
6. Wipe off the cleaning solutions with a clean, lightly moistened cloth.
7. Visually ensure that the device is clean. If visible soil remains, repeat cleaning procedure until the device is thoroughly clean.
8. Dry thoroughly with a dry, lint-free cloth and let air dry for at least 30 minutes.  
Drying times may vary based on the environmental conditions.
9. Reconnect the device to the power supply.
10. Reconnect all cables.
11. Turn on the power to the device.

## Cleaning internal components

On a regular basis, qualified service personnel should open the writer and blow dust from the unit with compressed air.

## Cleaning the print head

This procedure explains how to clean the thermal print head. From heavy usage, debris accumulates on the thermal print head and distorts the printed image. It is recommended that you perform this procedure when necessary, depending on usage.

A nonabrasive material/cloth and isopropyl alcohol are all that are necessary to perform this procedure.

1. Turn off the power to the device.
2. Disconnect the device from the power supply.
3. Open the writer door to expose the print head.
4. Remove paper roll.
5. Locate the print head. A flashlight may help illuminate the print head for closer examination.
6. Wipe the print head with alcohol and a nonabrasive material/cotton swab in a side to side motion. Continue wiping until the cloth/swab wipes clean.
7. Wipe paper drive roller clean of any bits of paper and debris with alcohol and a nonabrasive material.

## Disinfection

### Disinfection notices

|               |   |
|---------------|---|
| <b>NOTICE</b> | COLOR SHIFT. Some plastics may experience a slight change in color over time due to effects of disinfecting agents. This effect is cosmetic and not associated with product safety or normal function.  |
| <b>NOTICE</b> | SPOTTING, STAINING, CORROSION. Metal components including fasteners may corrode or become stained or spotted in appearance from continuous exposure to chlorine compounds like bleach. These effects are not associated with product safety or normal function. |

### Disinfection points to note

- Always clean before disinfecting.
- Always dilute cleaning and disinfectant agents according to their manufacturer's instructions. Always consider your hospital guidelines as well.
- Use only the permitted substances.
- Your hospital guidelines permitting, all cleaning and disinfection activities can be carried out at the bedside.
- Before drying a surface after wiping it, wait the minimum time required according to the substance manufacturer's instructions.
- Visually ensure that no substance residue remains on the device.

### Permitted disinfectants

About the following table:

- All third party trademarks are property of their respective owners.
- Trademark names and product availability may vary by country. Consult the column that lists ingredients to determine if an equivalent disinfectant is available in your country.

| Disinfectant                       | Manufacturer          | Ingredients  | Type of disinfectant                 |
|------------------------------------|-----------------------|--|--------------------------------------|
| CaviWipes*                         | Metrex Research, LLC. | <ul style="list-style-type: none"> <li>• Diisobutylphenoxyethoxyethyl dimethyl benzyl ammonium chloride - 0.28%</li> <li>• Isopropanol 17.20%</li> <li>• Ethylene Glycol Monobutyl Ether (2-Butoxyethanol) 1 to 5%</li> </ul>  | Quaternary ammonium and alcohol      |
| Cleanisept Wipes                   | Dr. Schumacher GmbH   | <p>Cleanisept solution (7.5%) contains as active ingredients:</p> <ul style="list-style-type: none"> <li>• Didecyldimethylammoniumchloride 0.25%</li> <li>• Alkylbenzyldimethylammoniumchlorid 0.25%</li> <li>• Alkylethylbenzyldimethylammoniumchloride 0.25%</li> </ul>                | Quaternary ammonium                  |
| Clinell Universal Sanitizing Wipes | GAMA Healthcare       | <ul style="list-style-type: none"> <li>• Benzalkonium chloride &lt; 0.5%</li> <li>• Didecyl dimethyl ammonium chloride &lt; 0.5%</li> <li>• Polyhexamethylene biguanide (PHMB) &lt; 0.10%</li> </ul>   | Quaternary ammonium and bisbiguanide |
| Clinell Sporicidal Wipes           | GAMA Healthcare       | <ul style="list-style-type: none"> <li>• Sodium Percarbonate 40 to 50%</li> <li>• Citric acid 5 to 10%</li> <li>• Tetra acetyl ethylene diamine 10 to 35%</li> </ul>   | Hydrogen peroxide and peracetic acid |
| Clorox Hydrogen Peroxide Wipes*    | Clorox Professional   | <ul style="list-style-type: none"> <li>• Hydrogen Peroxide 1.4%</li> <li>• Benzyl alcohol 1 to 5%</li> </ul>   | Hydrogen peroxide                    |
| Mikrozid Sensitive Wipes           | Schülke & Mayr GmbH   | <ul style="list-style-type: none"> <li>• Didecyldimethylammonium chloride 0.26%</li> <li>• Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides 0.26%</li> <li>• Quaternary ammonium compounds, C12-14-alkyl [(ethylphenyl)methyl] dimethyl, chlorides 0.26%</li> </ul> | Quaternary ammonium                  |

| Disinfectant                                       | Manufacturer                  | Ingredients   | Type of disinfectant                   |
|--|-------------------------------|---|--|
| PDI Sani-Cloth AF3 Germicidal Disposable Wipes*    | Professional Disposables Inc. | <ul style="list-style-type: none"> <li>n-Alkyl (68% C12, 32% C14) dimethyl ethylbenzyl ammonium chlorides 0.14%</li> <li>n-Alkyl (60% C14, 30% C16, 5% C12, 5% C18) dimethyl benzyl ammonium chlorides 0.14%</li> </ul> <p>Total of Quats: 0.28%</p>  | Quaternary ammonium                    |
| PDI Sani-Cloth Bleach Germicidal Disposable Wipes* | Professional Disposables Inc. | <ul style="list-style-type: none"> <li>Sodium Hypochlorite 0.63%</li> </ul>   | Chlorine                               |
| PDI Sani-Cloth HB Germicidal Disposable Wipes*     | Professional Disposables Inc. | <ul style="list-style-type: none"> <li>Benzyl-C12-18-alkyldimethyl ammonium chlorides 0.07%</li> <li>Quaternary ammonium compounds, C12-14-alkyl [(ethylphenyl)methyl]dimethyl, chlorides 0.07%</li> </ul>  | Quaternary ammonium                    |
| PDI Sani-Cloth Plus*                               | Professional Disposables Inc. | <ul style="list-style-type: none"> <li>n-Alkyl (68% C12, 32% C14) dimethyl ethylbenzyl ammonium chlorides 0.125%</li> <li>n-Alkyl (60% C14, 30% C16, 5% C12, 5% C18) dimethyl benzyl ammonium chlorides 0.125%</li> <li>Isopropanol 14.85%</li> </ul> | Quaternary ammonium (contains alcohol) |
| PDI Super Sani-Cloth Germicidal Disposable Wipes*  | Professional Disposables Inc. | <ul style="list-style-type: none"> <li>n-Alkyl (68% C12, 32% C14) dimethyl ethylbenzyl ammonium chlorides 0.25%</li> <li>n-Alkyl (60% C14, 30% C16, 5% C12, 5% C18) dimethyl benzyl ammonium chlorides 0.25%</li> <li>Isopropanol 55.00%</li> </ul>   | Quaternary ammonium and alcohol        |
| PDI Easy Screen Cleaning Wipes*                    | Professional Disposables Inc. | <ul style="list-style-type: none"> <li>Isopropyl alcohol 70%</li> </ul>   | Alcohol                                |
| Oxivir TB Wipes*                                   | Sealed Air                    | <ul style="list-style-type: none"> <li>Hydrogen peroxide 0.1 to 1.5%</li> <li>Benzyl alcohol 1 to 5%</li> </ul>   | Accelerated hydrogen peroxide          |
| Ethanol 70 to 96%                                  | Generic                       | <ul style="list-style-type: none"> <li>Ethanol</li> </ul>   | Alcohol                                |
| Isopropyl alcohol max. 60% by weight               | Generic                       | <ul style="list-style-type: none"> <li>Isopropyl alcohol</li> </ul>   | Alcohol                                |
| Bleach [dilute to max. of 0.65%]                   | Generic                       | <ul style="list-style-type: none"> <li>Sodium hypochlorite</li> </ul>   | Chlorine                               |

\* Available in the United States.

## Disinfecting external surfaces

The decision to disinfect must be made per the institution's requirements with an awareness of the effect on the integrity of the device. Do not use excessive drying techniques (e.g., oven, forced heat, sun drying).

1. Turn off the power to the device.
2. Disconnect the device from the power supply.
3. Remove all cables.
4. Dampen a soft lint-free cloth, or use disinfectant wipes with one of the permitted disinfectants.
5. Wring excess liquid from the cloth and wipe the exterior surface. Pay special attention to hard-to-clean areas, like grooves and crevices. Allow disinfecting solution to remain on device per disinfectant instructions or per hospital guidelines.
  - Any contact of disinfecting solutions with metal parts may cause corrosion.
  - Do not damage or bend connector pins when cleaning or drying.
  - Do not let fluid pool around connection pins. If this happens, blot dry with a cotton swab or soft cloth.
6. Wipe off the disinfecting solution with a clean, lightly moistened cloth.
7. Dry thoroughly with a dry, lint-free cloth and let air dry for at least 30 minutes.  
Drying times may vary based on the environmental conditions.
8. Reconnect the device to the power supply.
9. Reconnect all cables.
10. Turn on the power to the device.



Patient Monitor B105/B125, CARESCAPE Central Station, CARESCAPE PDM , CARESCAPE V100, Unity Network ID



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CARESCAPE B450, CARESCAPE B650, CARESCAPE B850, E-modules



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