



Cleaning + Disinfecting of Midmark Medical Devices + Accessories

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Cleaning + Disinfecting of Midmark Medical Devices + Accessories

Part

Midmark® Digital Vital Signs Device
Temperature Probe Cable
SpO₂ Cable
NIBP Cuff
NIBP Hose
Power Supply
Power Cord
(1 of 2)

Cleaning + Disinfection Method

Materials:

- Enzymatic detergent such as ENZOL® (US) or CIDEZYME® (outside the US)
- Distilled water
- Disinfectant solution (such as CIDEX® OPA or a 10% solution of household bleach [5.25% sodium hypochlorite] in distilled water)
- Soft cloths and/or soft-bristled brushes
- Protective gloves and eyewear

Procedure:

1. Disconnect the unit from the wall outlet.
2. Put on gloves and protective eyewear.
3. Prepare the enzymatic detergent, or disinfectant solution, according to the manufacturer's instructions and in separate containers.
4. Apply detergent to the product using a soft cloth. If material is dried on, allow to sit for one minute.
5. Wipe smooth surfaces with the cloth.
6. Use a soft-bristle brush on visibly soiled areas and irregular surfaces.
7. Remove detergent from product using a cloth dampened in distilled water.
8. Repeat as necessary.
9. Apply the disinfectant solution on affected area using a soft cloth. Allow the product to sit for five minutes.
10. Wipe away excess solution and clean product again with cloth dampened in distilled water.
11. Allow two hours for drying.



Cleaning + Disinfecting of Midmark Medical Devices + Accessories

Part

SpO₂ Sensor
(2 of 2)

Cleaning + Disinfection Method

Materials:

70% isopropyl alcohol pad

Procedure:

1. Remove the sensor from the patient and disconnect the sensor cable from the device.
2. Wipe off with alcohol pad. Allow sensor to dry before placing it on a patient.

Refer to the [operation manual](#) for complete details.



Cleaning + Disinfecting of Midmark Medical Devices + Accessories

Part

Midmark® Digital Spirometer

Cleaning + Disinfection Method

Materials:

Use a mild solution of detergent and water with a soft cloth. If necessary, use a mild sterilizing detergent with low alcohol content such as those generally used in hospitals.

Procedure:

To clean the outside of the spirometer, use a mild solution of detergent and water with a soft cloth. Do not use an excessive amount of solution. Be sure not to wet the ports on the top of the device or the battery compartment at the bottom (if applicable). Verify that all equipment, including accessories, is completely dry before using.

Refer to the [operation manual](#) for complete details.



Cleaning + Disinfecting of Midmark Medical Devices + Accessories

Part

Midmark IQecg® Digital ECG
(1 of 2)

Cleaning + Disinfection Method

Midmark IQecg® Digital ECG

Materials:

Use a mild solution of detergent and water with a soft cloth. If necessary, use a mild sterilizing detergent with low alcohol content such as those generally used in hospitals.

Procedure:

Clean the outside of the ECG module with a mild solution of detergent and water using a soft cloth. Avoid using excessive amounts of solution, which may infiltrate the connectors, battery compartments or ECG module. Verify that all equipment, including accessories, is completely dry before using.



Cleaning + Disinfecting of Midmark Medical Devices + Accessories

Part

Midmark IQecg® Digital ECG
(2 of 2)

Cleaning + Disinfection Method

ECG Patient Cable

Materials:

- Ethyl or Isopropyl alcohol 70 – 80%
- Glutaraldehyde 2 % (pH 7.5 - 8) (e.g. Cidex®)
- Quaternary ammonium compounds (e.g. Sani-Cloth® HB wipes)

Remove the disinfectant immediately after the recommended contact time by wiping the cable with a cloth.

Procedure:

Disconnect the cable. Wipe the plastic parts with a cloth moistened in lukewarm water with alcohol-free neutral soap. Always wipe toward the patient connectors/ECG clips. Proceed carefully and make sure to not damage the cable through excessive stretching, bending or kinking of the wires. Remove the cleaning agent by wiping the cable with a cloth moistened in water. Wipe or air dry the cable before use. Remove adhesive residues only with the alcohols listed in the following section. Never use other organic solvents (acetone or toluol will damage the cable jacket).

The ECG patient cable is not suitable for autoclave or UV sterilization. Never immerse or soak the cable. Prolonged alcohol exposure can negatively affect the mechanical properties of the cable jacket. N-propyl alcohol or sodium hypochlorite (bleach) should be avoided for the disinfection of the cables.

Refer to the [operation manual](#) for complete details.



Cleaning + Disinfecting of Midmark Medical Devices + Accessories

Part

Midmark IQholter® Digital Holter

Cleaning + Disinfection Method

Materials for Holter Recorder

For cleaning, use a soft cloth dampened with a mild household soap.

Procedure for Holter Recorder

Clean the outside of the IQholter recorder with a soft cloth dampened with a mild household soap. Avoid using excessive amounts of solution, which may infiltrate the connectors, battery compartments or recording module. Verify that all equipment and accessories are completely dry before using.

Materials for Patient Cables

For cleaning, use a solution of soap and water. The cables may be disinfected by wiping with a 1:10 solution of chlorine bleach and water or a 2% glutaraldehyde solution such as Cidex™.

Procedure for Patient Cables

Clean the cables following a hospital-approved cleaning procedure, such as those recommended by AAMI or AORN. Wiping the cables with a solution of soap and water followed by a rinse with water is a simple yet effective method for cleaning the cables. Do not immerse the cables in water. The cables should then be rinsed and wiped dry.

Refer to the [operation manual](#) for complete details.



Cleaning + Disinfecting of Midmark Medical Devices + Accessories

Part

Midmark HEINE® Diagnostic Instruments
(1 of 2)

Cleaning + Disinfection Method

Recommended Agents

Cleaning agent: enzymatic (e.g. Cidezyme® by ASP®)

Disinfectant agent:

- Otoscope and Ophthalmoscope Heads: alcoholic and/or quaternary ammonia compounds (e.g. SUPER SaniCloth® by PDI®, Sani-Cloth® AF3 by PDI®, Sani-Cloth® HB by PDI®)
- Sphygmomanometers: quaternary ammonia compounds (e.g. Sani-Cloth® AF3 by PDI®, Sani-Cloth® HB by PDI®)
- Blood Pressure Cuffs: a combination of alcoholic and quaternary ammonia compounds (e.g. SUPER SaniCloth® by PDI®)
- Rechargeable Handles: alcoholic and/or quaternary ammonia compounds (e.g. SUPER Sani-Cloth® by PDI®, Sani-Cloth® AF3 by PDI®, Sani-Cloth® HB by PDI®)
- NT4: quaternary ammonium compounds (e.g. Sani-Cloth® AF3 by PDI®, Sani-Cloth® HB by PDI®)
- EN200: hydrogen peroxide (e.g. PREempt™ Wipes, Clorox Healthcare® Hydrogen Peroxide Cleaner Disinfectant Wipes) or Quaternary Ammonium compounds (e.g. Super Sani-Cloth Germicidal Disposable Wipe).

Cleaning + Disinfecting of Midmark Medical Devices + Accessories

Part

Midmark HEINE® Diagnostic Instruments
(2 of 2)

Cleaning + Disinfection Method

Procedures

- Oscopes: The otoscope must be cleaned on the outside manually with a damp cloth and inside with a cotton-wool bud (wipe clean and wipe disinfect).
- Ophthalmoscopes: With the ophthalmoscope attached to the handle, clean and disinfect the ophthalmoscope manually (wipe clean and wipe disinfect).
- Sphygmomanometer: Clean and disinfect the sphygmomanometers manually (wipe clean and wipe disinfect).
- Blood Pressure Cuffs: Clean and disinfect the blood pressure cuffs and tubes manually (wipe or immersion cleaning and disinfection). The cuff sleeve can be hand-washed at max. 30°C after removing the inflatable bladder.
- Rechargeable Handles: Clean and disinfect the handles manually (wipe clean and wipe disinfect).
- NT4: Clean and disinfect the device manually (wipe clean and wipe disinfect). Place only reprocessed handles into the charger. Hold the charger with the slots facing down when cleaning and disinfecting.
- EN200: Clean and disinfect the device manually (wipe clean and wipe disinfect). When wiping the handles, hold them down to prevent the ingress of liquid. Ensure that the instrument is completely dry after reprocessing before you use it again.

Refer to individual [operation manuals](#) for complete details.



Cleaning + Disinfecting of Midmark Medical Devices + Accessories

Part

Midmark® + Ritter® Chairs,
Tables + Seating

Cleaning + Disinfection Method

Per [CDC Guidelines for Disinfection and Sterilization in Healthcare Facilities](#), disinfect with a solution of standard bleach and water mixed 1:10 (10%). Once the recommended contact time has been obtained, follow with a clear water rinse and thorough drying of material.

If customers wish to use a premixed disinfectant, please reference the latest list of [Suggested Premixed Disinfectants](#) that have been tested by an independent lab and deemed safe for use on our upholstery and all painted and metal surfaces.

Refer to the [Upholstery Care and Maintenance Instructions](#) for complete details.



Cleaning + Disinfecting of Midmark Medical Devices + Accessories

Part

Ritter® LED Lighting
(1 of 2)

Cleaning + Disinfection Method

Before cleaning the light, disconnect power and allow the light to cool. Do not touch the bulb or inner components with bare hands. Clean EXTERNAL SURFACES ONLY! Prevent fluids from leaking under covers to interiors or onto electrical components. DO NOT ATTEMPT to clean or disinfect the interior.

Ritter 250 LED Examination Light

Disinfecting External Surfaces:

Use only quaternary disinfectants to disinfect the light. Staining, pitting, discoloration or softening may occur if phenolic, iodophor or glutaraldehyde-based disinfectant is used on plastic surfaces.

Refer to the [operation manual](#) for complete details.



Cleaning + Disinfecting of Midmark Medical Devices + Accessories

Part

Ritter® LED Lighting
(2 of 2)

Cleaning + Disinfection Method

Ritter 253 LED Examination Light

Clean the painted metal and plastic surfaces using a clean, soft cloth and mild cleaner. Disinfect your product with a solution of standard bleach and water mixed 1:10 (10%) or chlorine based cleaners. Follow this with a clear water rinse and thorough drying of material. See current [CDC Guideline for Disinfection and Sterilization in Healthcare Facilities](#).

Refer to the [operation manual](#) for complete details.

Ritter 255 LED Procedure Light

Disinfecting External Surfaces:

1. Apply the appropriate disinfecting solution to a soft cloth.
2. Wring excess solution from cloth, then wipe external surfaces of the arms and light head.
3. Do not rinse or dry. Allow solution to air dry.

Use only quaternary disinfectants on the light. Staining, pitting, discoloration or softening could occur if a phenolic, iodophor or glutaraldehyde-based solution is used on the plastic surfaces of the light head. Also, using alcohol or aerosol spray cleaners/ disinfectants containing substantial amounts of alcohol in the formula may damage the lens.

Refer to the [operation manual](#) for complete details.



Cleaning + Disinfecting of Midmark Medical Devices + Accessories

Part

Synthesis® Cabinetry
+ Midmark® Workstations

Cleaning + Disinfection Method

Disinfecting:

Use a solution of bleach and water mixed in a 1:10 ratio (10%) to disinfect the cabinetry and workstations. This should be followed with a clear water rinse and thorough drying of material. Any deviation from this recommendation could risk damage to the materials, staining or discoloration.

For thermofoil worksurfaces, refer to the Omnova Solutions [surf\(x\) Laminates Chem Resistance Tech Bulletin](#) for complete details.

Solid Surface Countertops:

Refer to the [DuPont™ Corian® Solid Surface Effects of Healthcare Chemical Disinfectants Technical Bulletin](#) for complete details.

See the [Wilsonart® Care and Maintenance-Laminate](#) manual for complete details.



Cleaning + Disinfecting of Midmark Medical Devices + Accessories

Part

Ritter® Steam Sterilizers + Midmark QuickClean® Ultrasonic Cleaners
(1 of 3)

Cleaning + Disinfection Method

M9®/M9D + M11® Steam Sterilizers:

Caution: Before cleaning, make sure your sterilizer unit is cooled to room temperature.

Step 1: Wash the exterior of sterilizer using a cloth or wipe containing a quaternary amine disinfectant. Do not use metal brushes, steel wool or other abrasives to clean the unit. Do not use solutions containing alcohol or bleach.

Step 2: Rinse the sterilizer exterior with water* and let dry completely.

Step 3: Open the sterilizer door. Clean the gaskets and mating surfaces with a damp cloth.

Step 4: Using the drain tube mounted on the front of the unit to drain the water from the reservoir. With assistance, tilt the unit to ensure the reservoir has been drained as completely as possible. Note: This step is unnecessary if the sterilizer is connected to a direct-to-drain thermal reduction system.

Step 5: Remove all trays, racks and plates from the interior of the sterilizer. Wash these items and the inside of the sterilizer chamber with mild soap and water. Rinse with water after washing.*

Step 6: Let chamber air dry completely before closing the door.

Refer to the [operation manual](#) for complete details.

*Water, when referenced for washing or rinsing, is defined as distilled water or water that meets the water purity specifications found in the operation manual.



Cleaning + Disinfecting of Midmark Medical Devices + Accessories

Part

Ritter® Steam Sterilizers + Midmark QuickClean® Ultrasonic Cleaners
(2 of 3)

Cleaning + Disinfection Method

M3 Steam Sterilizer:

Cleaning External + Internal Surfaces

Caution: Before cleaning, make sure your sterilizer unit is cooled to room temperature

1. Drain water from the reservoir.
2. Prime the pump for 5-10 seconds using the following process:
 - A. Put the unit in Diagnostic Mode as described in the operation manual.
 - B. Press the Start button to start the pump priming. The unit will automatically perform a pre-programmed cycle. When the cycle is finished, the 2nd line of the display will show "PRIMING COMPLETE."
 - C. Press the Start button to return to the Diagnostic Menu.
 - D. Turn the power switch "Off" to exit Diagnostic mode.
3. With the power switch off, press and hold the <P> button while turning on the power switch.
4. Release the <P> button when the display reads "SERVICE DIAGNOSTICS."
5. Press and hold the Start button until "KEY TEST" appears on the display.
6. Press the Stop button 4 times. When the display shows "BOILER TEST," press the Start button to power on the boiler.



Cleaning + Disinfecting of Midmark Medical Devices + Accessories

Part

Ritter® Steam Sterilizers + Midmark QuickClean® Ultrasonic Cleaners
(3 of 3)

Cleaning + Disinfection Method

M3 Steam Sterilizer: Continued

Cleaning External + Internal Surfaces

7. Once the boiler starts, wait 30 seconds and then turn the power switch off.
8. With assistance, cautiously tip the unit forward to fully empty the reservoir.
9. Remove the door/tray and dry the tray and inside of the chamber.
10. Reinsert the door/tray in the chamber.
11. Drain and wipe out the external condensing tank.

Refer to the [operation manual](#) for complete details.

Ultrasonic Cleaners:

Before cleaning the equipment, always switch off and disconnect it from the power supply, allowing it to cool down to less than 40°C/104°F.

1. Drain the cleaning solution from the tank.
2. Remove the baskets and wipe down the inside of the tank with soap and distilled water.
3. Clean and rinse the baskets with soap and distilled water and let air dry.
4. Replace the baskets when dry.

Refer to the [operation manual](#) for complete details.



Cleaning + Disinfecting of Midmark Medical Devices + Accessories

Part

Midmark RTLS Clearview™ Badge

Cleaning + Disinfection Method

For routine cleaning:

- Wipe down with isopropyl alcohol.
- Never use Quaternary Ammonium Cation (Quat or QAC) agents, often labeled as an agent that ends in ammonium chloride, which will degrade the badge's plastic casing.
- Do not immerse badges in a cleaning solution.
- Do not autoclave badges.
- Avoid using UV sterilization equipment which rapidly deteriorates the badge plastic.

If a badge becomes contaminated:

Stronger disinfection procedures may be required. Bleach-based wipes and cleansers are most compatible with badge plastic.

However, the safety of your patients and staff is of the greatest concern, and Midmark RTLS advises that you adhere to your health system's disinfection protocol. If necessary, use your health system's approved disinfectant in the lowest concentration that complies with infection control standards.

After the allotted disinfection time, remove the disinfectant from the badge with water or isopropyl alcohol so that it does not continue to affect the plastic casing.



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