



CLEANING AND DISINFECTING MOBILE COMPUTERS AND SCANNERS

HOW TO CARE FOR YOUR MOTOROLA DEVICES

INTRODUCTION

When using Motorola digital scanners and mobile computers in healthcare environments, cleaning and disinfecting after every patient is a must. This document details how you can safely clean your Motorola devices daily, as well as the monthly maintenance routine that will help keep them up and running.

APPROVED CLEANING AGENT INGREDIENTS

The cleaning agent you select must contain active ingredients from the following list:

- Isopropyl alcohol (Including Wipes)
- Bleach/sodium hypochlorite
- Hydrogen peroxide
- Mild dish soap
- Ammonium chloride

Combining some or all of the listed chemicals may be dangerous. Always follow the directions listed on the chosen approved cleaning agent.

APPROVED BRAND-NAME CLEANING AGENTS

- Super Chlor wipes by Medtrol
- Tuberculacidal Quaternary Disinfectant by Steris
- Process NPD by Steris
- Spor Klenz RTU by Steris
- LpH se by Steris
- Caviwipes
- Sani-Cloth® and Super Sani-Cloth® Wipes
- HBSani-Cloth®
- PlusSuper Sani-Cloth®
- Virex® 256 and Virex® 5 Wipes
- Dispatch®
- 409® Glass and Surface Cleaner
- Windex® Blue, Windex® with Ammonia D and Windex® Cleansers: Antimicrobial
- Clorox® Bleach
- Ethanol 80%

Active ingredients or cleansers not listed above should be reviewed with the Motorola Solutions healthcare team.

Bulk packaged wipes, as well as alcohol and bleach-based solutions on a damp cloth, can be used to clean the device without impacting warranty or extended service coverage. Individually wrapped packages (versus bulk packaging) that are saturated are not recommended due to the resulting “pooling” of solution on the device.

DIGITAL SCANNERS

Cleaning the exit window is required. A dirty window may affect scanning accuracy.

- Do not allow any abrasive material to touch the window.
- Remove any dirt particles with a damp cloth.
- Wipe the scanner window using a tissue moistened with an approved cleaner (listed above).
- Do not spray water or other cleaning liquids directly into the window.
- If required, wipe the digital scanner with one of the approved cleaning agents listed in this document.

INGREDIENTS KNOWN TO DAMAGE PLASTIC

The following chemicals are known to damage the plastics on Motorola mobile computers and scanners and should not come in contact with the device:

- Ammonia solutions
- Acetone
- Ketones
- Ethers
- Aromatic and chlorinated hydrocarbons
- Aqueous or alcoholic alkaline solutions
- Ethanolamine
- Toluene
- Trichloroethylene
- Benzene
- Carboic acid

Special note on hand sanitizers utilized in the work environment

Some hand sanitizers commonly used in the healthcare environment may contain the harmful ingredients listed above, such as ethanolamine. Hands must be completely dry before handling devices to prevent inadvertent contamination with known harmful ingredients and damage to the plastics.

TECHNOLOGY BRIEF

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REGULAR CLEANING AND DISINFECTING

Following are the cleaning and disinfecting instructions for healthcare workers who need to disinfect their mobile computers and scanners after each patient visit.

1. Dampen a soft cloth with one of the approved cleaning agents listed above or use pre-moistened wipes.

- a. Never apply liquid directly to the device.
Do not pour, spray or spill any liquid on any device.
- b. Do not let liquid pool around the display window, the scanner window, trigger, cable connector or any other area on the device.

2. Gently wipe all surfaces, including the front, back, sides, top and bottom — do not wrap the device in the cloth or pre-moistened wipe.

- a. Special instructions when cleaning the front of the device:
 - Be sure to clean the keys and between the keys of mobile computers, the trigger and in between the trigger and the housing of Bar Code and RFID Scanners (use a cotton-tipped applicator to reach between keys and into tight or inaccessible areas).
 - After cleaning, immediately dry displays and scanner windows with a soft non-abrasive cloth to prevent streaking.

3. Allow the unit to air dry before use.

Once per shift, it is recommended that the device is cleaned with an isopropyl alcohol wipe to avoid build up of disinfectant materials such as bleach. Most disinfectants leave residual materials which build up over time. Residual materials then can be transferred to operators without gloves and should be avoided.

This procedure should be followed for any product treated with disinfectants.

MONTHLY 'DEEP CLEANING' MAINTENANCE

Keep your Motorola mobile computers, scanners and cradle in good working order with a regular comprehensive cleaning routine to remove the natural build-up of dirt that occurs with everyday use on connectors and the scanner exit window as well as the main surfaces of the device.

1. Housing.

- a. Follow the instructions for daily cleaning and disinfecting above to give the housing a general cleaning.

2. Scanner exit window.

- a. Wipe the scanner exit window with a lens tissue or other material suitable for cleaning optical materials such as eyeglasses.

3. Mobile computer connector.

- a. Remove the main battery from mobile computers and close the battery door.
- b. Dip the cotton portion of a cotton-tipped applicator in isopropyl alcohol.
- c. Rub the cotton portion of the cotton-tipped applicator along the pins of the connector. Slowly move the applicator back-and-forth from one side of the connector to the other. Do not let any cotton residue remain on the connector.
- d. Repeat at least three times.
- e. Use the cotton-tipped applicator dipped in alcohol to remove any grease and dirt near the connector area.
- f. Use a dry cotton tipped applicator and repeat steps c, d and e. (Note: use dry swab only, no alcohol.)

4. Cradle connector.

- a. Remove the DC power cable from the cradle.
- b. Dip the cotton portion of a cotton-tipped applicator in isopropyl alcohol.
- c. Rub the cotton portion of the cotton-tipped applicator along the pins of the connector. Slowly move the applicator back-and-forth from one side of the connector to the other. Do not let any cotton residue remain on the connector.
- d. Rub all sides of the connector (as illustrated below) with the cotton-tipped applicator.
- e. Spray compressed air in the connector area by pointing the tube/nozzle about 1/2 inch away from the surface. (Caution: When using compressed air, always wear eye protection; do not point nozzle at yourself and others — make sure the nozzle or tube is pointing away from your face; and read warning label on compressed air product.)
- f. Remove any lint left by the cotton-tipped applicator.
- g. If grease and other dirt are found on other areas of the cradle, use a lint free cloth and isopropyl alcohol to remove.
- h. Allow at least 10 to 30 minutes (depending on ambient temperature and humidity) for the isopropyl alcohol to air dry before applying power to cradle.

For more information on Motorola's mobile computing portfolio or cleaning instructions for Motorola's mobile computers, please visit www.motorolasolutions.com/healthcare