Cleaning and Disinfecting Guidelines for Zebra Vehicle Mount Computers

The Zebra VC Computers are designed for harsh warehouse, cold chain and yard environments. Zebra ultra-rugged vehicle-mounted computers are made to be mounted on material handling equipment and withstand extreme temperatures, shock and vibration to maintain operational continuity.

Introduction

Zebra vehicle mount computers are engineered to excel in warehouse work environments. These products are also designed to withstand an appropriate level of cleaning.

Just as with other devices that are used by workers in warehouse environments, Zebra vehicle mount computers should be cleaned to limit physical damage/wear to the devices as well as reduce the risk of spreading bacterial related illness.

This document provides guidelines to use when cleaning or disinfecting Zebra vehicle mount computer products and optimize their performance. Included below is a list of cleaning agents that are approved by Zebra for use on the vehicle mount computer family.

It is important to follow the cleaning and disinfecting product manufacturer directions regarding how to use their product to attain the efficacy indicated.

Cleaning and Disinfecting Guidelines

• Turn off and/or disconnect the device from power source.
• To avoid damage to the device or accessory, use only approved Cleaning & Disinfecting agents specified for vehicle mounted computers.
• Follow the Manufacturer’s directions on the approved Cleaning & Disinfecting agent for how to use their product properly and safely.
• Use pre-moistened wipes or dampen a soft sterile cloth (not wet) with the approved agent. Never spray or pour chemical agents directly onto the device.
• Use a moistened cotton-tipped applicator to reach tight areas. Be sure to remove any lint left over by the applicator.
• Do not allow liquid to pool.
• Allow the device to air dry, dry with a soft lint-free cloth or towelette before use. Ensure electrical contacts are fully dry before reconnecting and applying power
• Do NOT use steam or high-pressure washers on vehicle computers. This exceeds the seal rating and may cause damage.
Approved Cleaning and Disinfectant Agents for Zebra’s Vehicle Mount Computers

There are numerous cleaning agents used in the food processing industry, some of which contain ingredients that are harmful to Zebra Vehicle Mount Computer devices. Therefore, it is important to use only Zebra-approved cleaning and disinfecting agents for the Zebra Vehicle Mount Computer from the list below.

**Note:** any solution percentages specified in the list below should be adhered to and not exceeded.

**Warning:** The combining of chemical agents may be hazardous both to the user as well as to the device and is not approved. Always follow the safety instructions provided by the manufacturer of the approved cleaning agent, along with the Zebra cleaning guidelines, for safe handling and use.

<table>
<thead>
<tr>
<th>Cleaning Agent</th>
<th>Manufacturer/Brand Name</th>
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<tbody>
<tr>
<td>3% Hydrogen Peroxide and 97% Water Solution</td>
<td>Medipal® Alcohol Wipes</td>
</tr>
<tr>
<td>10% Bleach (Sodium Hypochlorite 0.55%) and 90% Water Solution *</td>
<td>Procter &amp; Gamble — Dawn® Dish Soap</td>
</tr>
<tr>
<td>91% Isopropyl Alcohol and 9% Water Solution</td>
<td>PDI - Super Sani-Cloth® Germicidal Wipe</td>
</tr>
<tr>
<td>Clorox® — Dispatch Hospital Cleaner Disinfectant Towels with Bleach *</td>
<td>PDI - Sani-Cloth Plus Germicidal Disposable Cloth</td>
</tr>
<tr>
<td>Clorox — Formula 409 Glass and Surface Cleaner</td>
<td>PDI - Easy Screen® Cleaning Wipe</td>
</tr>
<tr>
<td>Clorox Healthcare Hydrogen Peroxide Wipes</td>
<td>PDI - Sani-Cloth Bleach Germicidal Disposable Wipe *</td>
</tr>
<tr>
<td>Diversey — Virex® II 256 One-Step Disinfectant Cleaner</td>
<td>SC Johnson Windex® Original Glass Cleaner with Ammonia-D</td>
</tr>
<tr>
<td>Diversey — Virex 5 Wipes</td>
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</tbody>
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* Not for use on cradles.

The use of non-approved cleaning or disinfecting agents on Zebra Vehicle Mount Computers may result in damage to the product and may void the warranty.

**Special Precaution for Bleach-based Disinfectants**

Bleach-based products are known to corrode metals very quickly. Avoid allowing any bleach-based cleaner to touch the electrical contacts on the vehicle computers. If the contacts are exposed to bleach, it is important to completely remove it using only water or isopropyl alcohol solution.

**Special Precaution for Hand Sanitizers**

Some hand sanitizers contain ingredients that can be harmful to parts of the device. Hands should be completely dry before handling the device to prevent damage.
Additional Periodic Deep Cleaning Maintenance

Keep your Zebra vehicle mount computers and accessories in good working order with regular and comprehensive cleaning to remove the natural build-up of dirt that occurs with everyday use. Deep cleaning maintenance is recommended on a monthly basis.

1. Glass touch panels:
   - Wipe the touch panel glass with a lens tissue or other material suitable for cleaning optical materials such as eyeglasses.

2. Electrical Contacts
   - Dip the cotton portion of a cotton-tipped applicator in isopropyl alcohol.
   - Gently rub the cotton portion of the cotton-tipped applicator back and forth across the connector contacts of the Zebra device.
   - Using a dry cotton-tipped applicator, rub across the connector contacts of the Zebra device back and forth several times.
   - Carefully inspect and remove any cotton or other residue that remains on the connector.
   - Allow the isopropyl alcohol to air dry, or dry with a soft lint-free cloth or towelette.
   Ensure electrical contacts are fully dry before reapplying power.

3. Keyboard keys
   - Apply a couple drops of Isopropyl alcohol (70% or 91% solution) to each key.
   - Using a soft fine bristle brush gently brush the key in a circular motion to loosen dirt.
   - Wipe away the dirt with a wipe.
   - Allow to air dry or use canned compressed air (across the keys, not directly inwards) to dry and remove loose particles.
