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# **Cleaning Guidelines**

## HP Compaq Tablet PC Series

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Cleaning Guidelines  
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## Overview

This guide provides guidelines and recommendations for cleaning a Tablet PC.



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If the cleaning recommendations in this guide do not address a particular issue, or do not provide an optimal solution for your environment, contact your HP representative for assistance.

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The HP Compaq Tablet PC tc1100 Series for healthcare is specially designed for day-to-day use by clinicians, caregivers, patients, and families. Tablet PCs can be used for

- Capturing data.
- Looking up patient information and reference material.
- Providing education and training through video, audio, and more.
- Entering orders and prescriptions.
- Documenting home care visits and creating care plans.
- Viewing scanned documents and images.
- Accessing the Web wirelessly and securely.
- Tracking patients and looking up schedules.
- Entering hand-written notes and using voice dictation.
- Researching abstracts remotely.
- Sending and receiving e-mail.

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Using a Tablet PC in a healthcare environment increases caregiver productivity and enhances the patient experience. To save time, caregivers can take an information system directly to patients, rather than collect information on paper and then transcribe the information into a central system. Critical information, stored on the Tablet PC or accessed wirelessly, is available during the patient-caregiver interaction, improving the quality of care. Because mobile healthcare delivery is preferable and more advantageous to both caregivers and patients, Tablet PCs offer additional capabilities, such as on-board video education, audio recordings, and the ability to accept hand-written notes, patient questions, and signatures of patients and their families.

A single Tablet PC may be used by multiple caregivers or by patients and their family members during pre-op or post-op education videos. In healthcare establishments where Tablet PCs are mobile and often handled by multiple users, Tablet PC screens may become smudged or collect biological agents. Healthcare establishments should define and document cleaning policies and procedures to ensure safety for users and to satisfy regulatory requirements for documenting safety procedures.

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## Tablet PC Design

When cleaning the Tablet PC, note the following design features:

- The Tablet PC base is constructed of magnesium for structural support and strength.
- The Tablet PC screen is made of chemically-strengthened glass. The screen is also significantly more scratch resistant than Mylar or acrylic screens.
- The nonporous foam seal between the screen and the base is impervious to most industrial and commercial cleaning fluids when used in diluted concentration.
- The integration of the screen and the base is designed to provide an easy-to-clean continuous surface.
- The pen is used as a pointer when the Tablet PC is used in writing mode, or as an alternative to a mouse. The pen is stored in an enclosed pen holder.



The Portable Grip and Rugged Case accessories eliminate the transfer of contaminants into the pen holder by covering the pen holder opening and providing an external pen holder.

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## Tablet PC Components



| Item | Component           |
|------|---------------------|
| ①    | Tablet PC screen    |
| ②    | Tablet PC base      |
| ③    | Internal pen holder |

## Tablet PC Accessories

Tablet PC accessories include 2 durable, nonlatex cases that cover the outside edges of the Tablet PC: the Portable Grip and the Rugged Case. The Portable Grip and Rugged Case accessories help with the grip and protection of the edges of the Tablet PC. Refer to the following sections for more information and for component locations.

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## Tablet PC with a Portable Grip

The sleek, professional look of the lightweight Portable Grip offers a flexible, snug fit in a one piece design that is easy to put on the Tablet PC and keeps your tablet PC clean from dust, dirt, and the occasional bump or drop. It has an open-face design with access to buttons and easy access to the pen.

The rubber, nonlatex material improves the stability of your grip while writing. The strap allows you to support your Tablet PC in varying configurations—tray table in front of you or hanging by your side, freeing your hands for other tasks.



| Item | Component           |
|------|---------------------|
| ①    | Tablet PC screen    |
| ②    | Portable Grip       |
| ③    | External pen holder |



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## Tablet PC with a Rugged Case

The durable Rugged Case offers protection from the occasional bump or drop, and from dirt, dust, and light moisture. The case is made of shock-absorbing material designed to withstand the occasional drop to a hard surface.

When not in use, let the Tablet PC rest comfortably hanging from the sturdy shoulder strap, freeing your hands for other tasks. The shoulder strap is durable neoprene and adjustable. The Rugged Case also has an adjustable hand strap, which allows the Tablet PC to rest comfortably on your arm or hand during use.



| Item | Component           |
|------|---------------------|
| ①    | Tablet PC Screen    |
| ②    | Rugged Case         |
| ③    | External pen holder |

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# Cleaning and Disinfecting Products

Products that can be used to clean and disinfect the Tablet PC and are commonly available in healthcare establishments include:

- Isopropyl alcohol, 5% concentration
- Dimethyl benzyl ammonium chloride, 25% concentration
- Ammonium chloride, 25% concentration
- Glass cleaning fluid without alcohol
- Germicidal disposable wipes. These wipes come in different forms and under different names, such as Super Sani-Cloth by PDI.
- Water
- Dry chamois, static-free cloth without oil
- Static-free cloth wipes



**CAUTION:** The following cleaning agents should be avoided:

- Strong aromatic solvents, such as acetone, methylene chloride, and hydrocarbons.
  - Fibrous wiping materials, such as paper towels. Over periods of continuous use, these materials create scratches where foreign particles and biological agents can be trapped.
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# Cleaning Procedures

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**WARNING:** To prevent electric shock or damage to components, do not attempt to clean the Tablet PC until you

- Shut down the Tablet PC.
  - Disconnect the Tablet PC from external power.
  - Disconnect all powered external devices from the Tablet PC.
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**CAUTION:** Do not spray liquids on the Tablet PC. Household solvents and commercial cleaning fluids can permanently damage Tablet PC surfaces, and any liquid can damage internal components on the Tablet PC or the optional keyboard. For example, avoid aromatic solvents.

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If the Tablet PC requires cleaning daily or more frequently, HP strongly recommends that you use a Portable Grip or Rugged Case accessory to reduce discoloration and surface scratches.

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Refer to the following sections for procedures on:

- Cleaning and disinfecting the Tablet PC screen and base
- Cleaning the pen and pen holder area
- Cleaning the Tablet PC keyboard, optional keyboard, or optional mouse
- Cleaning accessories, such as the Portable Grip and Rugged Case
- User hygiene

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## Cleaning the Tablet PC



**CAUTION:** Do not submerge the Tablet PC in any fluid.

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Disinfect the Tablet PC periodically, according to the cleaning policies of your establishment or

- Between patients, when the Tablet PC is used by patients.
- Between shifts or between users, if the Tablet PC remains under control of the staff and physicians.
- Daily, weekly, or monthly, depending on the mobility of the Tablet PC.
- Between patients upon entry or exit from each home by homecare practitioners.

To clean the Tablet PC screen, use a soft, lint-free cloth moistened with a standard glass cleaner. Do not spray the glass cleaner, or any other liquid, directly onto the screen surface.

To clean the sides or back of the Tablet PC, use a soft microfiber cloth moistened with an acceptable cleaning solution.

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## Cleaning the Tablet PC Pen

The Tablet PC pen is made of GE Xylex and is chemical resistant.

Clean the pen between users. Use a soft cloth dampened with either a germicidal agent, hospital-approved cleaning agent, or water. Rub the pen in an up and down motion to aid in removing debris and build-up.



**CAUTION:** Do not put any fluid or material other than the pen in the pen holder. The pen holder is not sealed off from some of the internal electronics of the Tablet PC.

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Routine insertion and removal of the pen may contribute to debris or build-up around the pen holder opening. To clean the pen holder area, use a soft cloth slightly moistened with a germicidal agent, hospital-approved cleaning agent, or water in a rotating motion around the opening of the pen holder.



The Portable Grip and Rugged Case accessories eliminate the transfer of contaminants into the pen holder by covering the pen holder opening and providing an external pen holder.

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## **Cleaning the Tablet PC Keyboard, Optional Keyboard and Optional Mouse**

Dust, lint, and other debris can affect the performance of the attached keyboard or an optional keyboard. To prevent keys from sticking or not functioning, clean the keyboard frequently using a can of compressed air with a straw attachment. Blow the compressed air around the base of each key.



Using a household or commercial vacuum cleaner to clean the keyboard may deposit debris, rather than remove debris.

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To clean the key surfaces, use a soft, damp, lint-free cloth.

To clean an external mouse, adhere to accepted cleaning practices, depending on the material of the mouse, whether the mouse is sealed or not, and any cleaning requirements from the mouse manufacturer.

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## Cleaning the Accessories

Tablet PC accessories include the Portable Grip and Rugged Case.

The Portable Grip resists debris, staining, and degradation during normal use. However, it should be removed and cleaned periodically. Remove the Portable Grip and immerse it in warm water containing a hospital-approved germicidal soap used for hand cleansing. Thoroughly dry the Portable Grip before replacing it around the Tablet PC.

To clean the Rugged Case, use a soft cloth moistened with an acceptable cleaning solution. Do not spray the cleaning solution directly onto the surface.

## User Hygiene

Repeated use of a Tablet PC by various people increases the possibility that the Tablet PC will be exposed to a variety of agents and debris. Caregivers should follow routine hygiene by washing their hands before using the Tablet PC, between patients, and after contact with any biological or infectious material.



Patients and family members may not be able to follow the routine hygiene procedures of the healthcare establishment. Consider routine cleaning of the Tablet PC after patient and family use.

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## Training and Documentation Considerations

To improve cleaning practices within your establishment, consider the following suggestions:

- Integrate Tablet PC care and cleaning guidelines into existing policies and procedures for other equipment and into new employee orientation practices.
- In establishments with a large number of Tablet PC users, or during the introduction of Tablet PC technology, provide an area with cleaning materials, this guide, and a Tablet PC for training purposes.
- Make this guide available to all Tablet PC users.
- Create an addendum to this guide, detailing Tablet PC standards of care specific to your environment, activities, and technology.
- Train all Tablet PC users with the information from this guide, clearly identifying Tablet PC components, to ensure that handling and cleaning protocols are understood.
- Create checklists to identify training completion.
- Review Tablet PC use and cleaning periodically between users or shifts.
- Create checklists to ensure that Tablet PCs remain in good working condition, and to reduce build-up and transfer of any biological or mechanical debris from user to user.