

White Paper

How to clean your Avionics Displays

What's inside?

- Things to know before you start cleaning avionics displays
- How to clean the LCD panel
- How to clean the bezel or keyboard

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1 INTRODUCTION

Cockpits and cabin areas are often subject to harsh environmental conditions. Depending on the operating environment and the mission executed, possible sources of contamination may include sand, dust, fingerprints, spray, liquids or any other contaminating agent. Aboard the flight deck, these substances can gradually degrade the image quality of your cockpit displays. In addition, the presence of grease and dirt on the displays' surface can menace their legibility, especially in bright ambient illumination environments. All of this results in a notable discomfort for the user. Therefore, it is essential to clean avionics displays regularly and appropriately. In this article, we have listed ten practical tips and tricks for the daily maintenance of your cockpit displays.



2 BEFORE YOU START

Before you start cleaning your Barco avionics displays, there are a few basic rules of thumb to bear in mind:

- 1 First take off your rings or other jewelry in order to prevent the front glass or LCD panel from scratching.
- 2 Always wear clean protective gloves when handling or cleaning the display.
- 3 Make sure the display is in the "power off" mode.
- 4 Do not apply pressure on the front glass or LCD panel.
- 5 Do not use any liquid directly on the front glass, LCD panel or bezel. This may damage the internal electronics. Instead, apply the liquid to the cleaning cloth.
- 6 Do not use:
 - lye or cleaning solutions containing lye;
 - acid;
 - detergents with fluoride, ammonia, abrasives;
 - a sponge with abrasives, steel wool, cloth with thread made of steel or other coarse tools.

3 BASIC DISPLAY COMPONENTS

For cleaning purposes, we should distinguish between the basic display components: the LCD panel on the one hand and the display bezel or keyboard on the other.

4 CLEANING THE LCD PANEL

Dust, fingerprints, grease etc. can be removed as follows:

1. Take a lint-free, non-abrasive cloth and lightly moisten the cloth with Isopropyl Alcohol (IPA).
2. Gently clean the panel with the lightly moistened cloth. When you do this, it is strongly recommended to bear in mind the following recommendations:
 - Instead of using the cloth like a tissue, use a rectangular piece of rigid plastic - the size of a credit card is perfect - and fold the cloth so that one of the small sides of your supporting item is fully covered.
 - Then moisten the cloth and "brush" your display with the cloth-covered plastic positioned at an angle of about 30° with respect to the LCD surface in a straight vertical direction. Start in one of the upper corners.
 - Apply only gentle pressure with the cloth on the LCD and use both hands to control pressure and direction.
 - The "damp" trail immediately behind the passage of your cloth should be as large as your folded cloth. If irregularities appear, moisten the cloth a bit more and move the cloth around your support in order to use a clean part of the cloth.
 - Once at the bottom of the LCD, repeat the exercise, making parallel passes from top to bottom until the full LCD surface is covered.
3. Take another clean, dry, soft and lint-free cloth and gently wipe the panel dry if needed.



5 CLEANING THE DISPLAY BEZEL OR KEYBOARD

1. Clean the bezel with a soft cloth (preferably lint-free) dampened with mild detergent and water. The cloth you use must be moist, not wet! Never use chemical cleaning products, such as benzene, toluene, xylene or other solvents.
2. Repeat with water only.
3. Wipe dry with a dry cloth. If you have any more questions about cleaning your Barco avionics displays, please contact your regional Barco support team.

