

## **Guidelines to properly CLEAN your LCD / LED screens**

### **Recommended Cleaning Method: (Short instructions)**

- Turn your display off and allow it to cool.
- Make sure your cloth is clean and free of any grit before starting.
- Spray a liberal amount of the cleaning solution onto one portion of the cloth.
- Using light pressure, wipe the screen to evenly distribute the solution on the screen.
- Rotating the cloth to a dry portion, wipe the screen until it is dry. You may need to rotate the cloth a second time. Always use light wiping pressure.
- Wipe gently and **do not overwork or apply excessive pressure** to avoid damaging the surface or surface coatings. Finally clean the edges and corners by lifting any dust or debris onto the cloth or use a clean soft brush or a vacuum with a clean soft brush attachment.
- Read the special considerations below.

**Warning Note:** Using Windex, Pledge or other similar household products that contain ammonia on your screen can damage the anti-glare coating of your screen. Unfortunately we know of no way to repair this so please be advised that the anti-glare coatings on most of today's screens need to be cleaned with solutions made specifically for screen cleaning, such as [Photodon Ultra screen cleaning solution](#).

### **Proper Screen Cleaning**

Treat your screen as you would an expensive camera lens, by using quality cleaning materials and tested techniques. The biggest concern is not to damage the special anti-glare coatings applied to these surfaces. Purchase a specially designed kit for cleaning your display which should contain high quality microfiber cloth and a specially formulated quality cleaning solution [available as a kit](#) from Photodon.com. We provide our kits in a re-closeable zip-lock bag for clean storage between uses.

### **About LCD Screens:**

**LCD and LED screens are made of plastic materials**, unlike the big shiny curved glass tubes of yesteryear. This soft plastic film is vulnerable to scratches, damage by sharp articles and/or improper cleaners. All these screens require special attention to clean properly and safely.

#### **Things NOT To Do:**

- Do not clean with the monitor turned on
- Do not press on the screen with your fingernails or other objects
- Do not apply excessive wiping pressure
- Do not use dirty, abrasive or linty cloths
- Do not use any alcohol except isopropyl alcohol\*
- Do not use any cleaners, such as acetone, which contain ketones as they will destroy plastics and the anti-glare coatings quite quickly.
- Do not use ammonia cleaning products.
- Do not allow liquid to run into the edges under the frame of the screen.
- Do not use Kleenex, paper towels, sponges or other coarse shop towels! These materials may contain abrasives that can scratch the surface coatings as well as leaving lint on your screen.

### Good Things To Do:

- Work with the screen display turned off and cool.
- Wipe the screen using light pressure.
- Use clean, lint free cotton, microfiber cloths or low-lint wipes.
- Use water, diluted isopropyl alcohol (in moderation) or, ideally, a specially formulated, low impact [screen cleaning solution](#).
- Apply solutions to the cloth then wipe the screen with the cloth to avoid the possibility of excess moisture running into the frame of the device.
- Use a vacuum with clean soft brush attachment or a clean soft brush to remove dust from edges or corners.

**Worth Repeating:** Most screens have an anti-glare coating that can be permanently scratched or easily worn by excessive wiping pressure or from improper cleaning solutions. Make certain that the cloths you use are clean and do not contain any sand or grit.

### Vary your screen cleaning depending on its condition:

- The most common type of screen cleaning is dust particles attracted to the surface of the screen.
- A second type of screen situation is visible smoke and pollutants that have over time caused a hazy or yellowish look.
- The most severe is a combination of the above, plus fly droppings (little round dots) or other unknown substances on the surface of the screen.

### Factors that can affect the screen being cleaned:

**Size of the screen:** With a small display (24" or less), you can reasonably clean the whole screen at one time. On a large screen you may want to clean half or a third of the screen at a time. Trying to clean the whole surface of a large flat panel screen can result in streaking and the greater possibility that you will damage the screen coatings.

**Surface temperature of the screen:** Working on a warm screen where the solution is evaporating too quickly may cause streaking. To a lesser extent the humidity of the room is also a factor.

### Streaking or Hazing:

Streaking is caused by not applying enough solution to the screen. If the screen dirt is not suspended in solution, it creates more of a paste, which the cloth spreads leaving streaks. This can be damaging to the surface coatings. Working on a warm screen causes the solution to evaporate too quickly which will have the same result as using not enough solution.

### Most Recommended Cleaning Method:

Spray the solution onto a portion of the cloth making the cloth quite damp, then wipe the screen with the damp cloth. This eliminates the possibility of damaging the screen from solution running down the screen and into the frame area.

### More Advanced Cleaning Method:

If you know you have a good, fine mist sprayer on your solution bottle, spray the solution directly onto the screen surface. Have your cleaning cloth in hand, ready to catch any runs that may develop before they reach the screen edge. On a laptop you may be able to position the screen more horizontally to reduce this risk.

### Screen Wiping Method:

With a clean microfiber cloth, use light wiping pressure, rotate the cloth often and wipe over any one area a minimal number of times.

### Why Use Microfiber Cloth?

Each filament of microfiber is a hundred times thinner than a human hair and is split into wedge shaped strands, multiplying the surface area the osmosis / wicking power many times. Microfiber lifts more of the finer dirt particles, oily finger prints, streaks and other contaminants. Microfiber screen cloths can clean the surface of an LCD monitor far better than a cotton cloth with much less linting. Photodon offers several [microfiber cloth](#) types that are suitable for cleaning of LCD and other display screens.

### \* Cleaning Technique if a cleaning solution is not available:

Use 70% isopropyl alcohol, a first aid antiseptic available at the drug store diluted, 50-50% with pure or distilled water as a solution under the following circumstances. **Do not use often** as it can deteriorate/dry and make plastic brittle and the effect on screen coatings is unknown. **Apply this solution** with a microfiber cloth or lint free wipe. (see note below)

### How to Remove Ink or Permanent Marker from Screen:

- **How to remove ink or permanent marker from the surface of the screen.** This technique has worked for many users. Try a solution of 50 - 50% water and "70% isopropyl rubbing alcohol", available in drug stores. If this does not work then use the 70% isopropyl alcohol full strength on a clean cloth this should remove most inks from the screen. Do not use this any more than necessary and rub lightly as it could cause damage if over used.
- One customer who tried the above method found that it did not work on red marker, so she: "took a can of aerosol hairspray, sprayed some on a paper towel, then dabbed a Q-tip in the spray and proceeded to gently rub the ink spot. It removed the ink completely without ruining the screen!" This is **not** a recommended method but might be tried as a last resort and with much care.

\*\* Consult your manual for manufacturers recommended cleaning procedures before using any **liquid cleaners** on LCD / notebook screens. [www.photodon.com](http://www.photodon.com) phone: 847.377.1185