

The SIRKOM touch sensor is typically used with LCD in 3 scenarios.

1) As a sensor on a shop window. The LCD is mounted behind the touch foil.



The foil is laminated to the glass using cling or permanent adhesive and the LCD is butted up against the foil/window.

In some cases the window is dressed with a vinyl so that the overall appearance is better and it doesn't just look like a TV in the window.



2) The touch foil is mounted on glass or acrylic and used to create an overlay.

This can be either in an aperture in a wall, on a trade show as a stand, or even in the case of a totem or kiosk or outdoor enclosure.

The foil is mounted on the glass or acrylic and then the LCD display is mounted behind the sensor.

Foil on glass in an aperture in a wall



Foils on glass mounted in front of multiple LCD's at trade show.



Foil on glass built into a totem with LCD behind



Foil on glass built into table top



3) Integration of the foil into an LCD unit.



This is a special case and some special design work and customization of the foil and glass is normally required. Usually this is done by experienced integrators.

Warranty of the LCD unit and integrated LCD/Touch sensor unit are important to consider as well.

Please contact SIRKOM to discuss your requirements.

Things to consider when using the SRK-ESK Interactive Touch Foil with LCD

- The sensor should be set up with the coarse gain set as low as possible but will still allow good positive touches. This means that there will be as low a level of noise as possible in the system.
- The sensor always has a low level of background noise. The setup of the sensitivity and the press threshold is to allow the sensor to differentiate between background noise and true touches.
- Sometimes the mouse will move around randomly of its own accord. This is due to spurious noise in the system and can be caused by a number of things.
 - o Disconnect the cable to the PC and uncheck the “Enable Selected Control” box in the output tab in MA7_control_EN.exe. You will then be able to work with the sensor until the sensitivity setup is working in a correct manner.

Things to look for if there is too much noise in the LCD /foil combination

- 1) An air gap of 5 mm or more will be required between the LCD panel and the touch sensor.
 - Where SIRKOM have experience of a particular LCD we will share that information. In other cases the only way to discover the distance is by trial and error.
 - If the LCD is too close then the resulting noise interference with the touch foil will result in spurious random mouse movements.
 - In all cases the earth cable provided with the touch foil controller MUST be connected to the metal CHASSIS of the LCD. The whole setup should be very well earthed.
 - If the earth of the system is floating then random noise may occur.
 - We have had examples of foils being one floor in a building and being noisy, and on a different floor and being perfectly OK.
 - The Press Threshold in the driver is set too close to the Finger Pressure; either the Press Threshold must be moved to the right slightly or the Coarse Sensitivity must be reduced.
- 2) It is important to consider the cooling of the LCD unit. The touch foil will withstand temperatures higher than the LCD. It is important to allow for circulation of air in front of the LCD. In some cases fans have been used to force air through the gap. This is not an issue for the touch foil but an issue of heat generation by the LCD (especially if it is in a sunny window)
- 3) Sometimes Windows sees the foil as a mouse and installs a serial ball mouse driver. To check for this go to control panel, system/device manager and look under mice and pointing devices. If serial ball mouse is installed right click on it and select disable. This will not be an issue with the USB version of the foil
- 4) Other causes of noise
 - Check routing of the cables. It may be too close to a power source of some kind
 - If there is a store theft detection system nearby (RFID) then this may cause interference. It can be effectively shielded with a metal shield such as aluminum foil.
- 5) Other electronic devices nearby.
 - To check the cause of the noise, try to move the foil to another location and install it there, if possible with a known working setup.
 - The store clothing tag detector near entrances can cause electrical noise and can stop a touch system working if too close. A grounded metal plate between the two systems will prevent any problems.