

Cleaning Silicon Based Fingerprint Sensors



In a real-world environment, the sensors can become soiled due to repeated contact with users' fingers or other sources of contamination. Unless this

contamination on the surface of the sensor is extremely thick, it will not have any effect on the ability of the sensor to capture fingerprints. However, users may want to

clean the surface of the sensor occasionally for aesthetic reasons. It is important to clean the sensor in a way that does not damage the surface or result in discoloration of the finger ring. This specification describes how the sensor surface may be cleaned

without causing damage to the sensor.

In normal use, monthly cleaning of the sensor is recommended. To clean the finger drive ring and the sensor surface, perform the following steps:

1. Remove the electrical power from the fingerprint sensor by disconnecting it from its power source.

2. Use any type of household kitchen or window cleaner, such as Formula 409, Fantastic, Windex, or any generic versions of these cleaners.

Do NOT use chlorine-based cleaners, such as Clorox bleach, non-chlorine bleach, or chlorine-based bathroom or mildew cleaners. Chlorine based cleaners will not necessarily affect the functionality of the fingerprint sensor, but they will discolor the finger drive ring and could damage the surrounding enclosure and peripheral components to the sensor.

Do NOT use any solvents, such as acetone, MEK, TCE, paint thinner, turpentine, etc. Solvents will not adversely affect the sensor, but they might damage the surrounding enclosure and peripheral components to the sensor.

3. Wet one end of cotton swab (not soaking or dripping wet) with one of the above-mentioned cleaners. Gently rub the sensor surface and finger drive ring with the wet cotton swab, slowly rotating the swab so a new, clean surface of the swab is

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constantly exposed to the sensor surface. Do not allow cleaner to drip or run down into the electronics around the sensor.

Do NOT use nylon brushes, scouring pads, or steel wool. These items can cause damage to the sensor.

4. After cleaning with the wet swab, gently rub the surfaces again with a dry cotton swab. Use a clean swab each time the sensor is cleaned. (If a dirty swab is used, it may make the sensor dirty again).

Caring for the Fingerprint Sensor

The sensors are designed to perform well even under harsh conditions; nevertheless, some precautions should be taken to avoid damaging the sensor: The sensor can be damaged by a discharge of static electricity from your body. However, a plastic conductive fingerprint mask that is connected to a ground plane surrounds the fingerprint sensor. You should always touch the conductive plastic mask before touching the sensor in order to safely discharge any static electricity that may be present on your skin or clothing.

The Ridge-Lock is provided as part of this conductive mask to serve both as a finger placement guide and as the first point of contact with the reader. To properly use this Ridge-Lock, slide your finger across the ridge, parallel to the sensor. When the ridge locks into place under your first joint, lower your finger evenly onto the sensor and apply moderate pressure. Using such fingerprint placement will guarantee that static electricity is discharged from your body before touching the sensor directly. This requires that the reader have a proper connection to earth ground. Do not place the fingerprint sensor close to a heat source, such as a radiator or hot plate. With the exception of the above-mentioned cleaners, do not spill any liquids on the sensor.

The sensor should not be exposed to direct contact with the elements, such as sun, rain, snow or excessive moisture. Not Recommended for outdoor use.

Please contact KSI Technical Support for further information. Do not subject the fingerprint sensor to heavy shocks or vibrations.

Do not allow the sensor to come in contact with metallic objects.

Please consult KSI Technical staff or direct any question to the following:

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