

Morpho Biometric terminals

Finger position recommendations



Finger position recommendations

How to get the best quality

- **Acquisition needs to be done with extreme care, in order to :**
 - **get the best image quality**
 - **increase recognition performance**
 - **reduce recognition time**
- **Then, it is highly recommended to :**
 - **Maximize the contact between the fingerprint and the sensor**
 - **Exert firm, but not excessive, finger pressure on the surface of the sensor**
 - **Do not press too hard**
 - **Do not slide nor roll the finger across the sensor**
 - **Do not move the finger during acquisition**
 - **Wait for the extinction of sensor backlight before removing the finger**

Fingerprint sensors

Finger position recommendations

Fingerprint most useful area

- **The most useful area is located around the centre of the fingerprint**
 - Fingerprint central area must be aligned with sensor centre

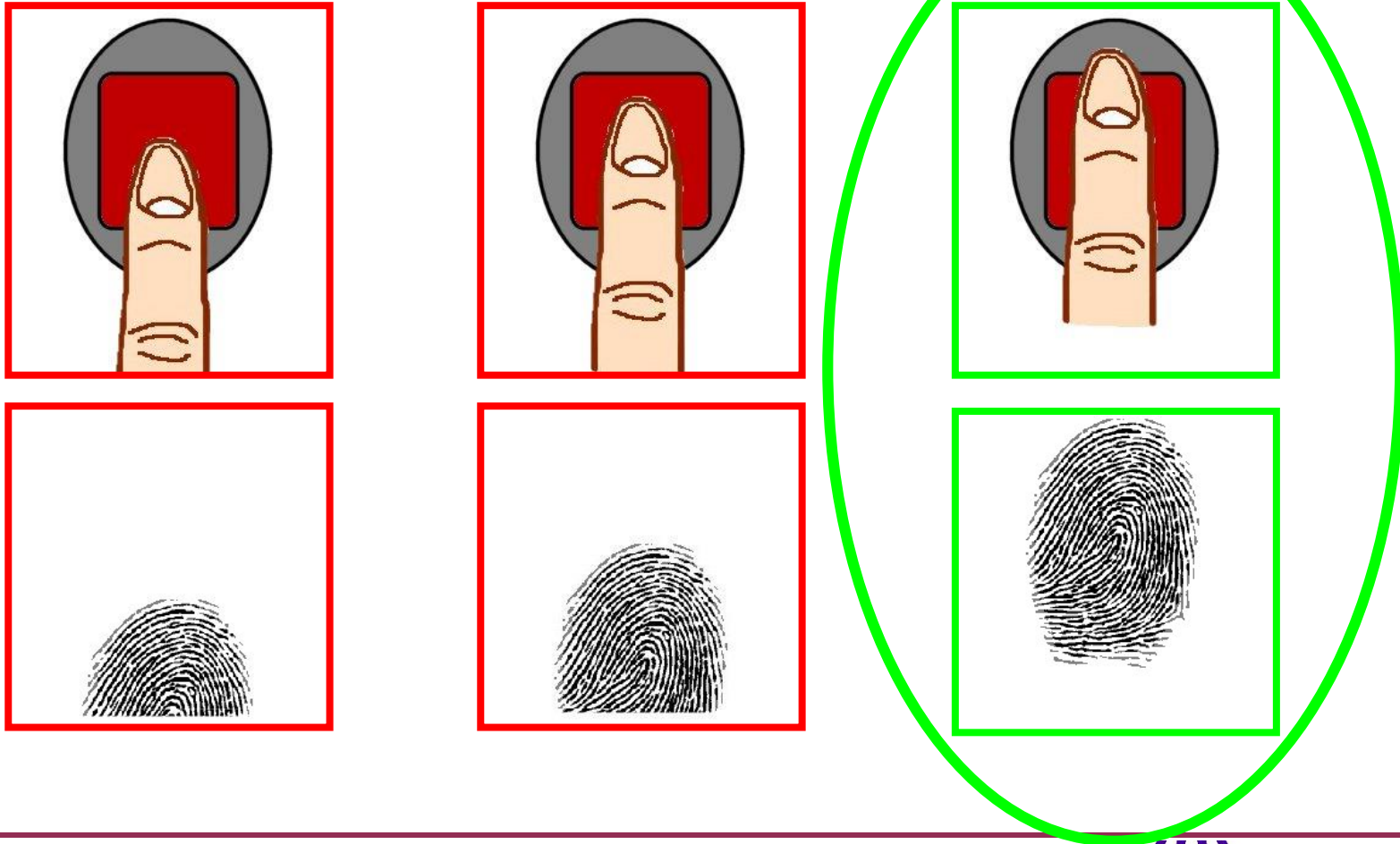
Area containing
the maximum
information



Finger position recommendations

Finger Height

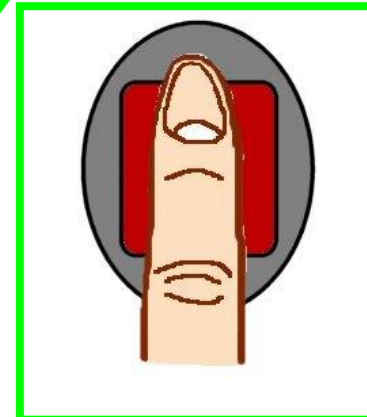
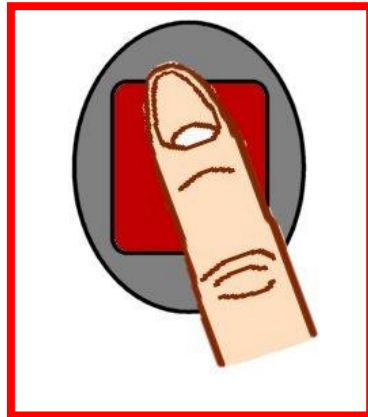
- Align center of 1st phalanx with sensor center



Finger position recommendations

Finger angle

- The finger must be parallel to sensor sides

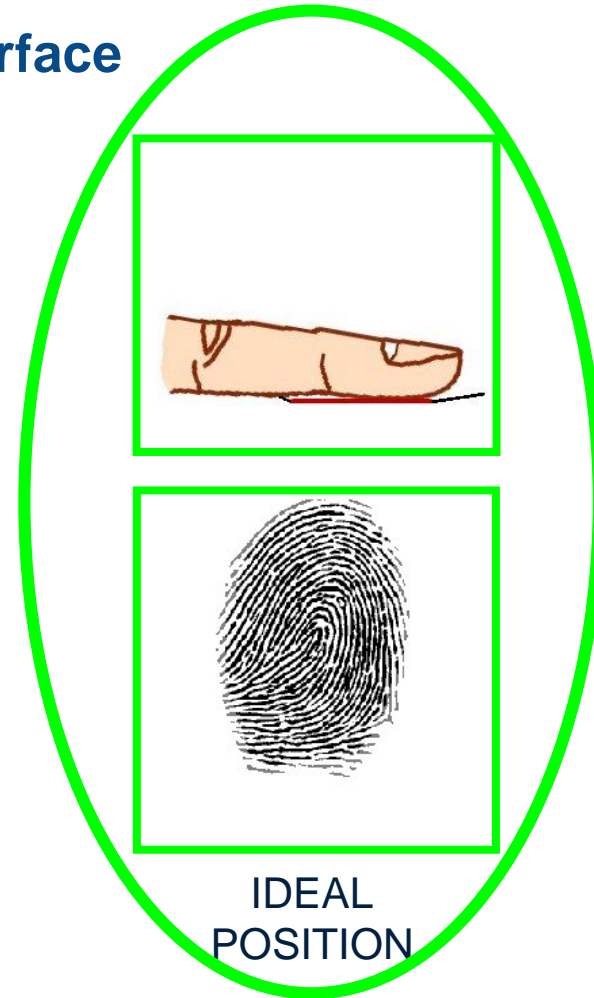
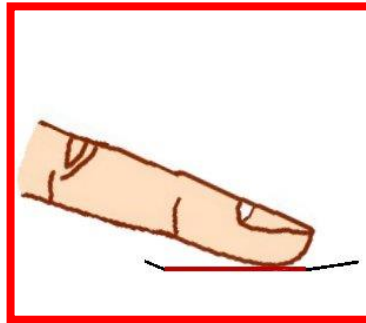
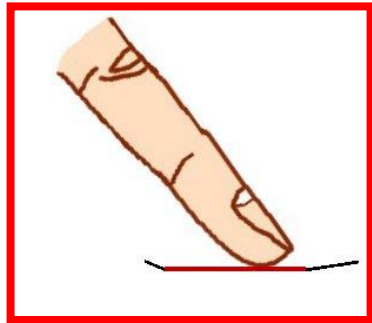


IDEAL
POSITION

Finger position recommendations

Finger inclination

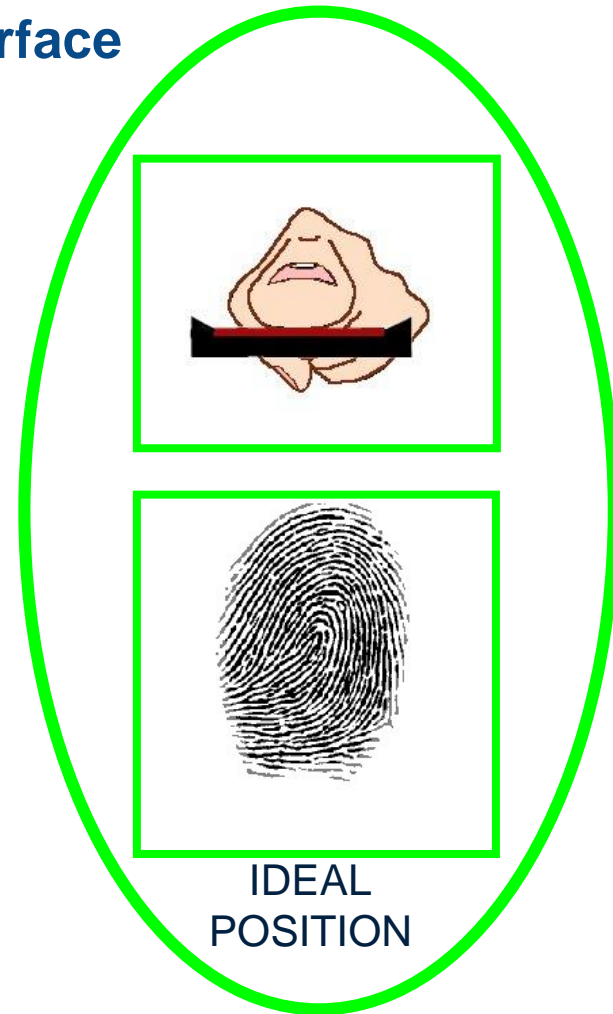
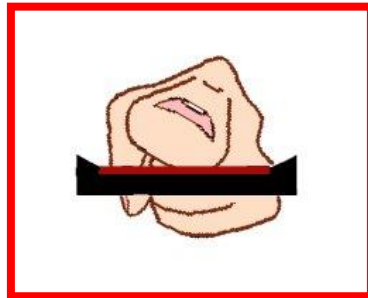
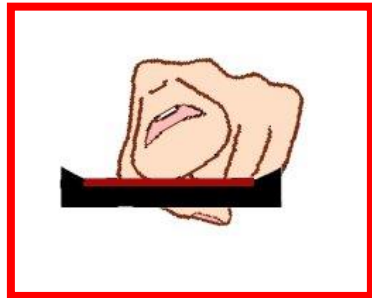
- Finger must be parallel to the sensor surface



Finger position recommendations

Finger rotation

- Finger must be parallel to the sensor surface



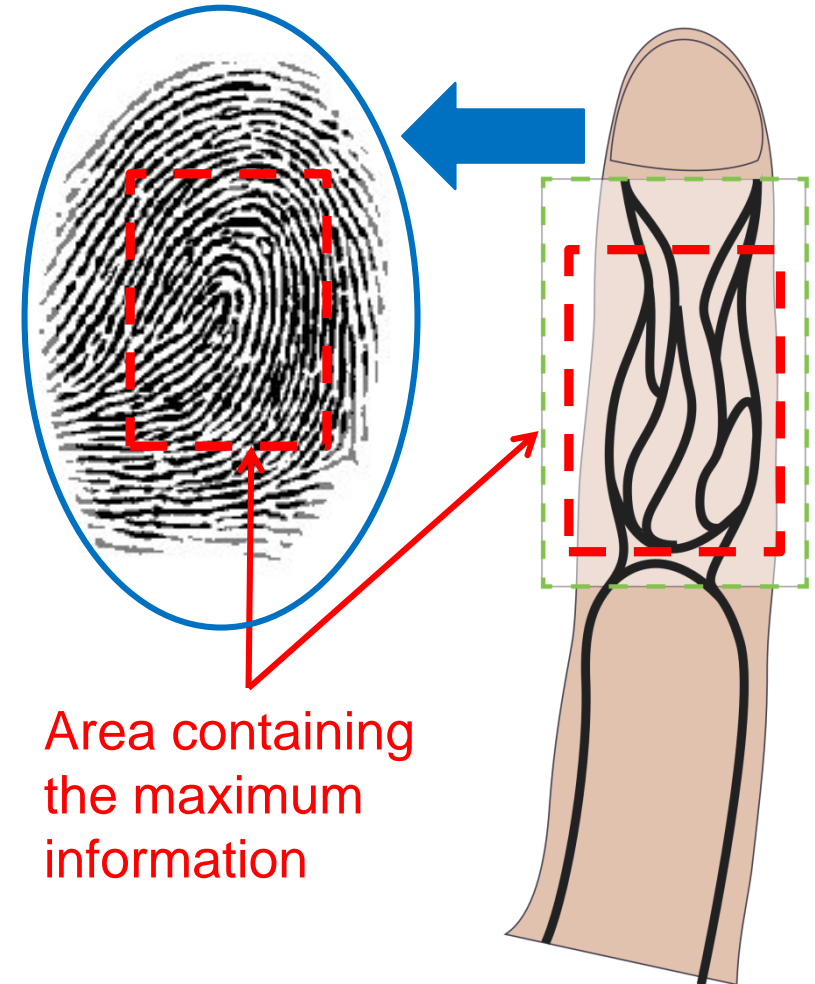
IDEAL
POSITION

Fingerprint + Vein sensors

Finger position recommendations

Fingerprint and vein network most useful areas

- **Fingerprint : the most useful area is located around the centre (1st phalanx)**
 - Fingerprint central area must be aligned with sensor centre
- **Finger Vein (blood vessel pattern): the area of interest is usually located between the 1st and the 3rd phalanxes**
 - The finger tip must be placed in full contact with the round shape guide (please refer to next pages)

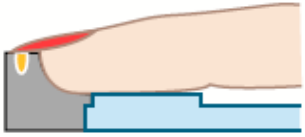
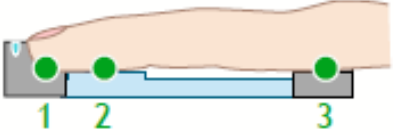
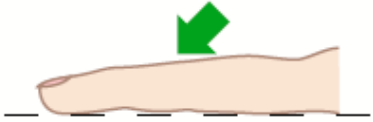


Area containing
the maximum
information

Finger position recommendations

Fingerprint and vein sensors

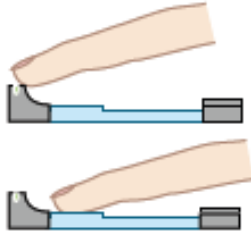
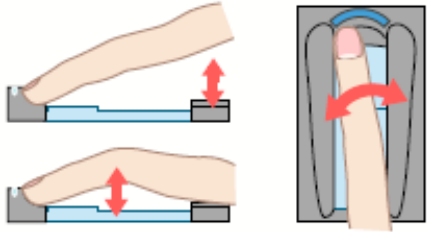

Good position

	<ul style="list-style-type: none">➤ Place finger tip on the round shape guide by the LED indicator.➤ In case of long nail, place nail above the LED indicator with finger tip touching the round shape guide
	<ul style="list-style-type: none">➤ Keep finger tip in contact with the round shape guide (1).➤ Make sure that fingerprint is in contact with the optical transparent surface (2).➤ Place finger root on its positioning guide (3).➤ Let rest hand palm on the shell of the terminal
	<ul style="list-style-type: none">➤ Keep finger straight.

Finger position recommendations

Fingerprint and vein sensors

Bad positions

	<ul style="list-style-type: none">➤ Do not place finger tip on top of the LED indicator.➤ Do not place the finger tip on the sensor surface : it must be in contact with the round shape guide.
	<ul style="list-style-type: none">➤ Do not lift finger.➤ Do not bend finger.➤ Finger must be parallel to the guide walls.
	<ul style="list-style-type: none">➤ Do not roll the finger.➤ Do not bend finger.➤ Do not arch finger backwards➤ Do not tense finger and do not press strongly so as to avoid blood vessels constriction.

Recommendation for all sensors

- **When finger biometric data acquisition is difficult, please follow the recommendations listed below :**
 - **The finger is cold**
 - ✓ Solution : warm up the finger
 - **The finger is wet**
 - ✓ Solution : wipe the finger
 - **The finger is dry**
 - ✓ Solution : warm up the finger and/or add a little bit of humidity
 - **The finger is dirty**
 - ✓ Solution: wash hands
 - **Remove bandages or adhesive tapes from the fingerprint area, and from the 2nd phalanx of the finger**
 - **Do not press or tense finger to avoid blood vessels constriction**

Finger position recommendations

Contacts

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