

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

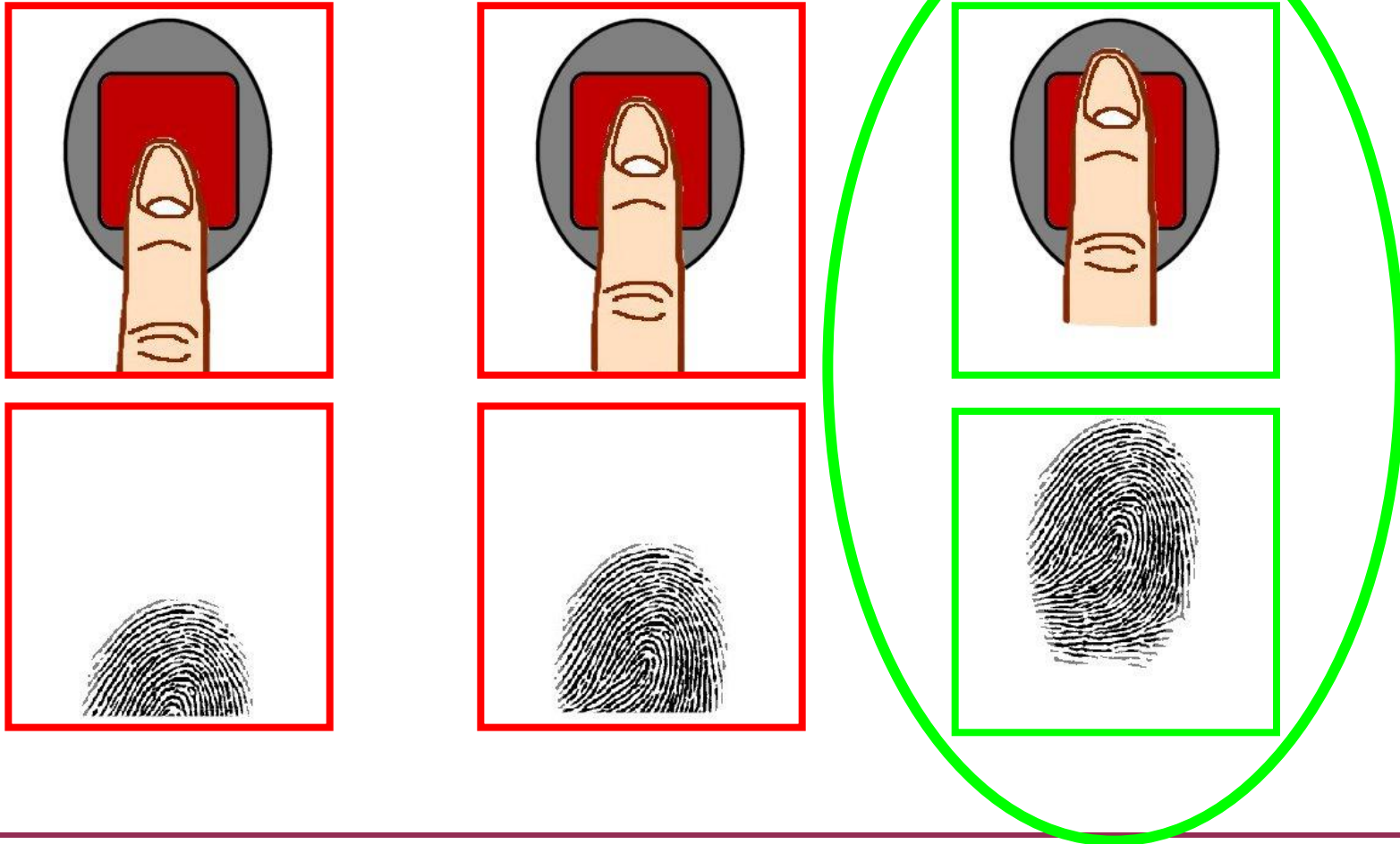
Area containing
the maximum
information



Finger position recommendations

Finger Height

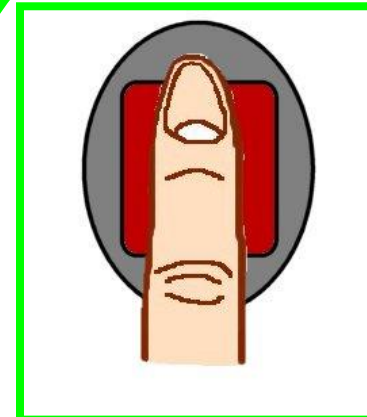
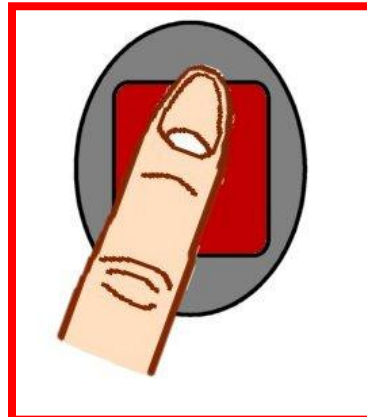
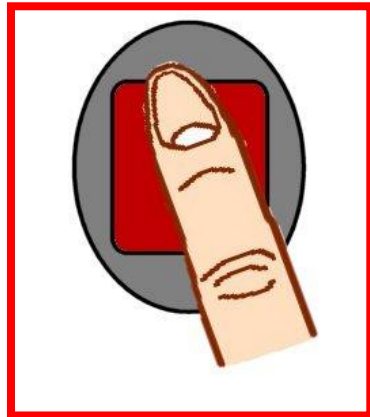
- Align center of 1st phalanx with sensor center



Finger position recommendations

Finger angle

- The finger must be parallel to sensor sides

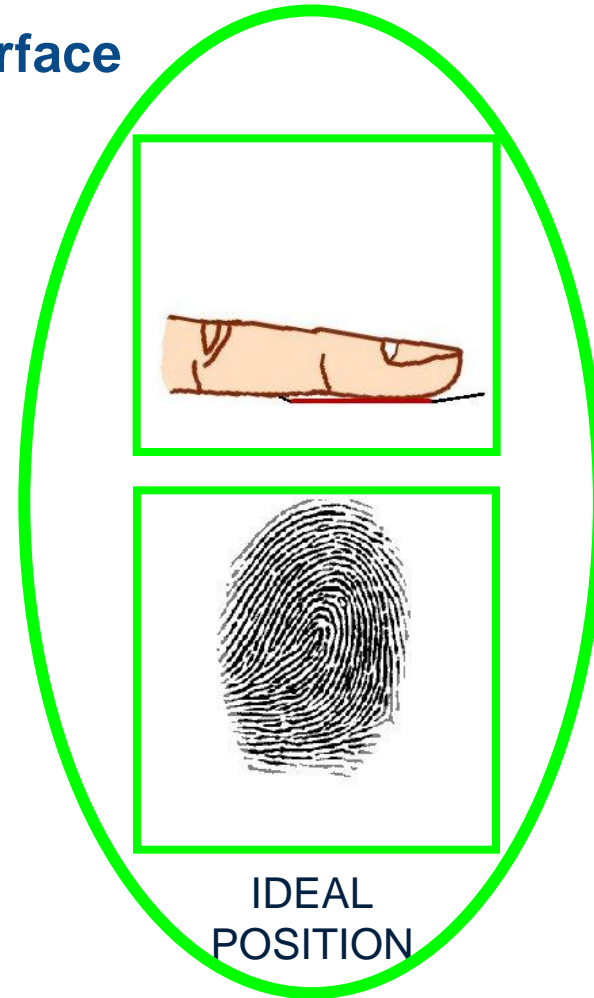
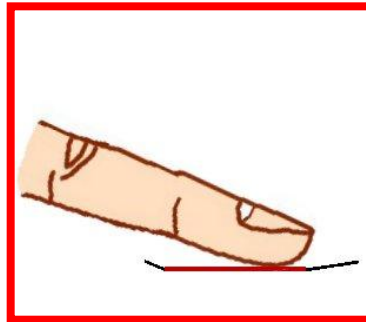
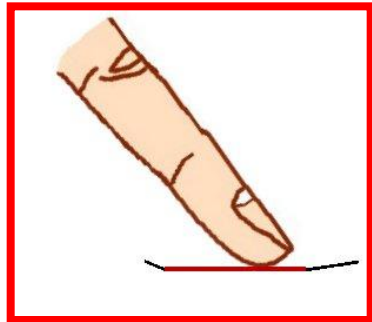


IDEAL POSITION

Finger position recommendations

Finger inclination

- Finger must be parallel to the sensor surface

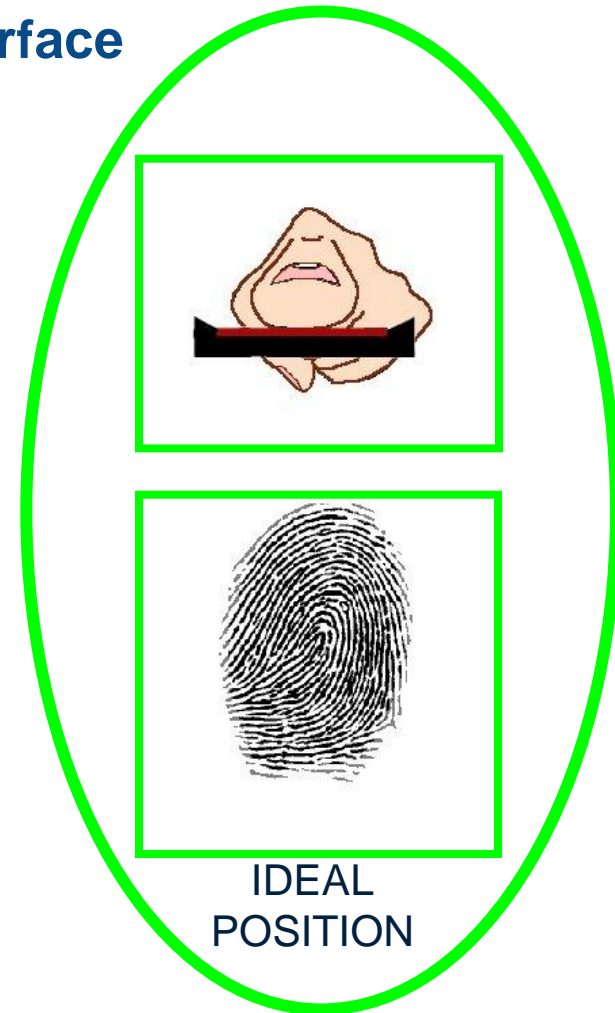
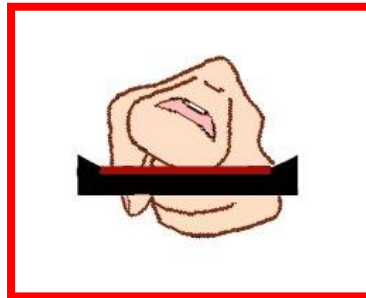
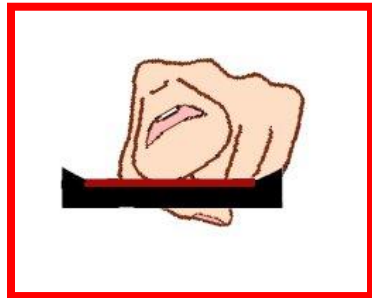


IDEAL
POSITION

Finger position recommendations

Finger rotation

- Finger must be parallel to the sensor surface



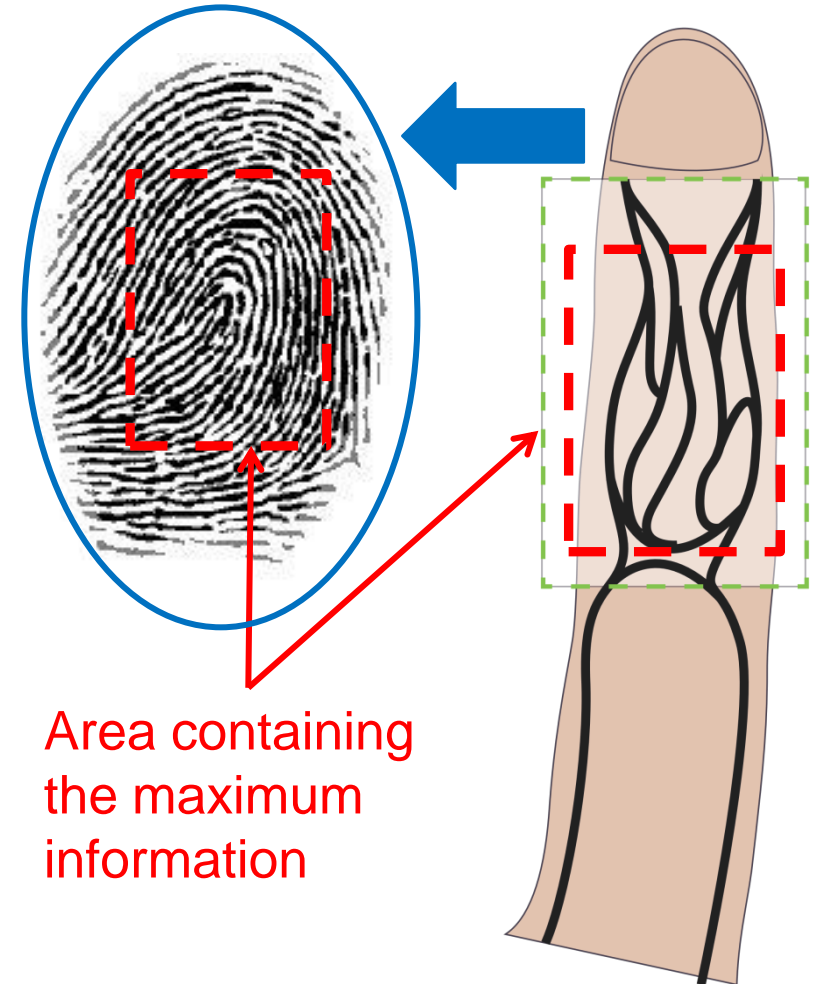
IDEAL
POSITION

Fingerprint + Vein sensors

Finger position recommendations

Fingerprint and vein network most useful areas

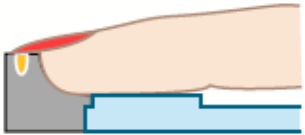
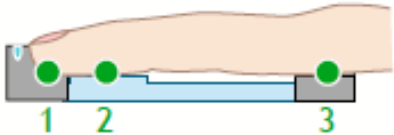
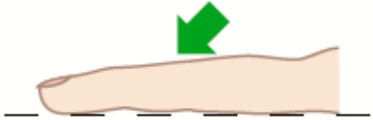
- **Fingerprint : the most useful area is located around the centre (1st phalanx)**
 - Fingerprint central area must be aligned with sensor centre
- **Finger Vein (blood vessel pattern): the area of interest is usually located between the 1st and the 3rd phalanxes**
 - The finger tip must be placed in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



Finger position recommendations

Fingerprint and vein sensors

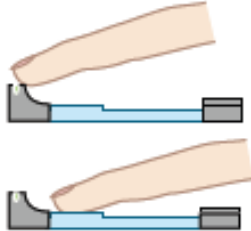
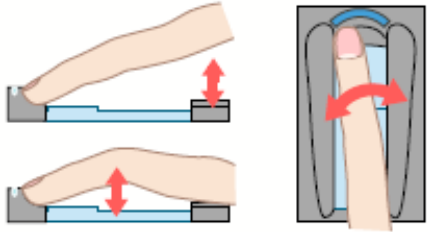

Good position

	<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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