



# FIVE-O

## USER MANUAL

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# WELCOME!

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Thank you for purchasing FIVE-0, Integrated Biometrics' newest addition to our patented Light Emitting Sensor (LES) fingerprint scanning solutions. FIVE-0 is the most durable, highest performance FAP 50 FBI Appendix F-certified ten-print live scanning solution.

Please read this manual thoroughly before using your FIVE-0 to review proper steps for unit operation and capture processes. Your Integrated Biometrics reseller and the IB team are ready to answer any questions you may have!

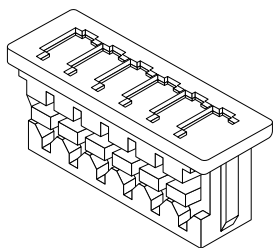


# CONNECTING

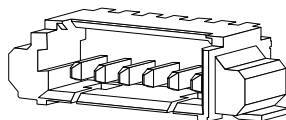
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## CONNECT USB TO DEVICE

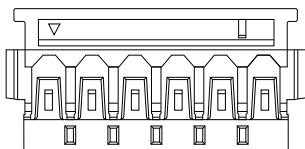
1. Download and install the latest IBScanUltimate SDK
2. Connect FIVE-0 to the system via USB (USB 2.0 or later)
3. Integrated Biometrics provides a variety of test applications for demonstration. IBScanUltimate SDK includes demonstration applications for supported platforms and source code for ease of deployment.
4. See below for connection options Download and install the latest version of the IBScanUltimate software kit (SDK).



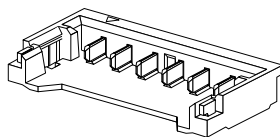
**Molex 51021-0600:** 6 position Rectangular Housing Connector (female) natural 0.049" (1.25 mm) PicoBlade™ Connector System



**Molex 53261-0671:** 0.049" (1.25mm) 6-Position Header Connector (Male) Surface Mount, Right Angle PicoBlade™ Connector System



**Molex Receiver (female) 78172-5006**



**Molex connector (female) 78171-5006**

# CLEANING AND DISINFECTION

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For proper cleaning and disinfection of IB products, visit:

<https://integratedbiometrics.com/cleaning>

# RESOURCES

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## **SUPPORT/SOFTWARE DEVELOPMENT**

The IBScanUltimate Software Development Kit (SDK) is a set of robust tools that empower solution providers with the ability to deploy compelling LES biometric acquisition applications. The SDK includes support for a variety of operating systems and exceeds the needs of the most challenging environments.

The SDK includes Application Programming Interface (API) documentation, IB software components, demonstration applications and source code for each platform. Demonstration source code is a simple reference for integrators to rapidly develop solutions using Integrated Biometrics' LES technologies. We encourage you to review the included materials and explore the limits of creativity when designing custom biometric solutions.

If you have any questions, please contact your Integrated Biometrics reseller or the IB team. We'll be glad to provide assistance during solution development.

# SCANNING

## FINGER CONDITIONS

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### VERY MOIST FINGERS

- Result: Images too dark, poorly defined. Indicates too much moisture on the fingers.
- Solution: Dry the fingers with a towel or cloth before fingerprint capture.
- The resultant images will be lighter and the NFIQ quality scores will improve.

### VERY DRY FINGERS

- Result: Images take several seconds to appear or contrast appears lighter than desired.
- Solution: Rub a small amount of moisturizer on the fingertips. (Do not slather.)
- The resultant images will be darker and the NFIQ quality scores will improve.
- Gentle or light contact with the plate is recommended in scanning. Placing extra pressure on the hand is not recommended.
- Avoid using hand sanitizers, alcohol based lotions, and baby wipes prior to scanning.

### BEST PRACTICES

- Never put a wet hand on the scanner i.e., just washed and not thoroughly dried, holding a bottle of liquid that leaves condensation on your hand. Hands should be wiped dry.
- Never use two hands on the scanner at the same time (see next page)



Normal Fingerprints



Wet Fingerprints

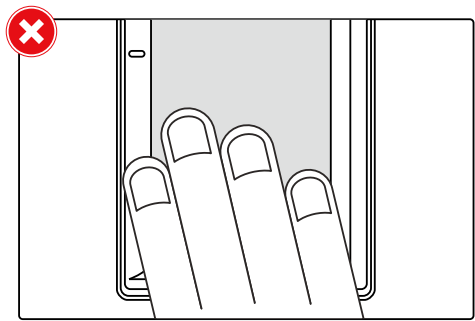
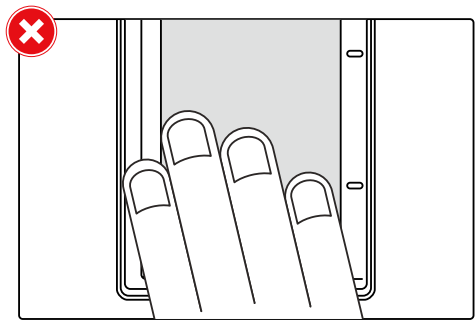
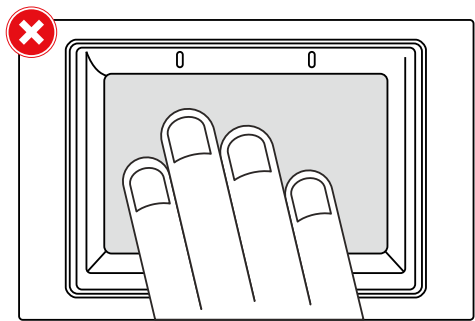
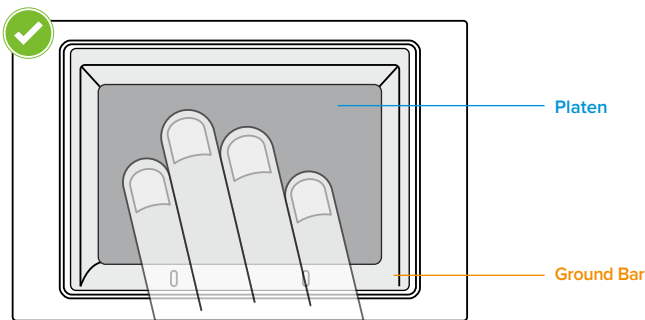


Dry Fingerprints

# HAND ORIENTATION

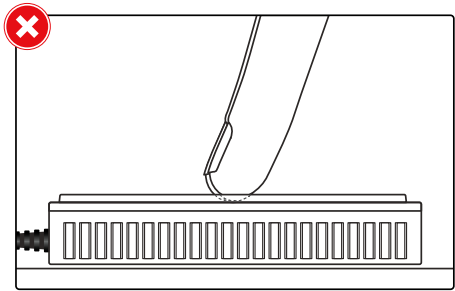
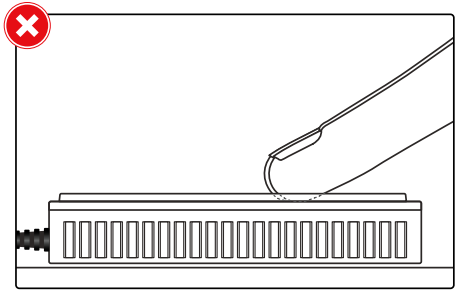
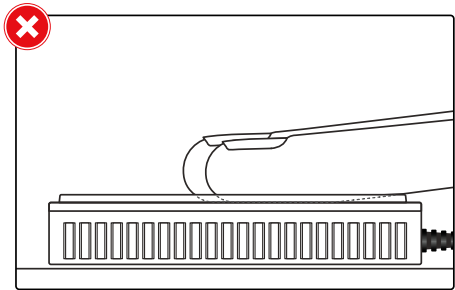
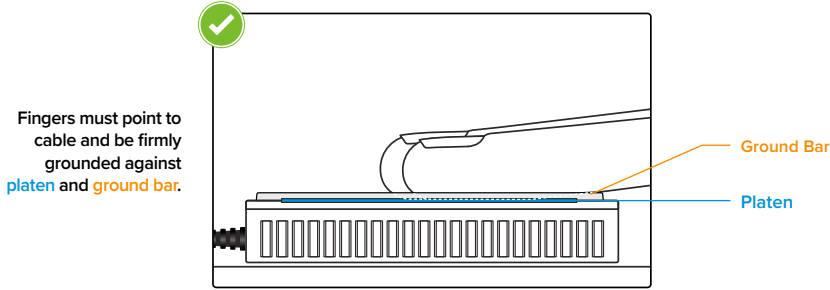
## CORRECT PLACEMENT – TOP VIEW

Fingers must point to cable and be firmly grounded against **platen** and **ground bar**.



# FINGER CONTACT

## CORRECT PLACEMENT – SIDE VIEW

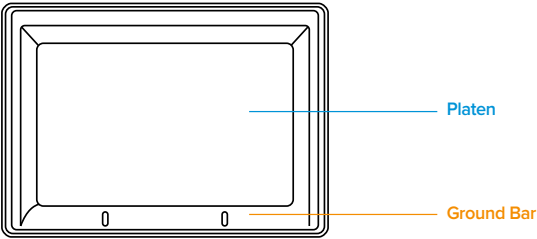




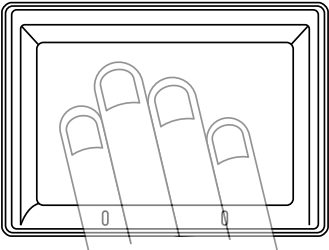
# FLAT SCANNING

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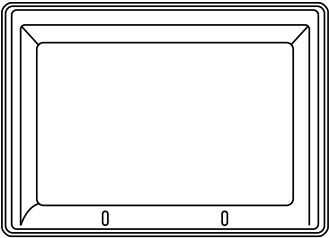
## FINGER POSITION



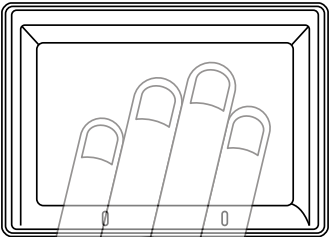
Ready to Scan



Place your right hand firmly against the bezel to ensure proper contact.



Ready to Scan

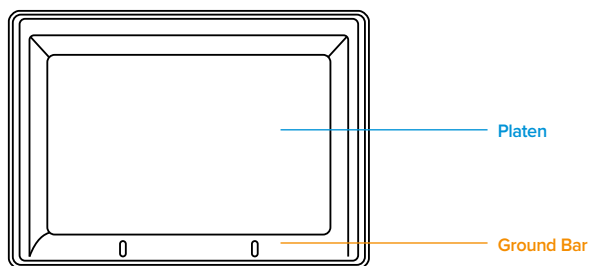


Place your left hand firmly against the bezel to ensure proper contact.

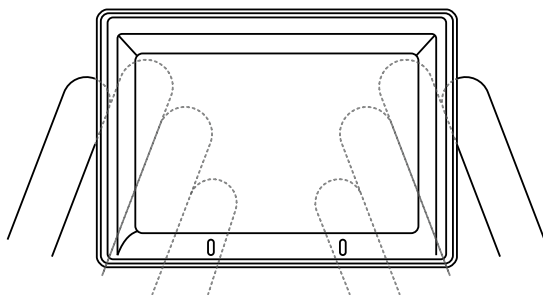
# FLAT SCANNING

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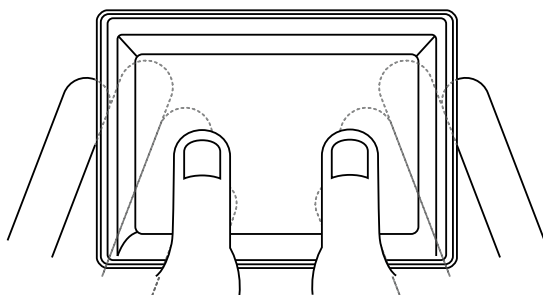
## THUMB CAPTURE



Ready to Scan



Hold the unit with your index fingers pointing towards the cables.

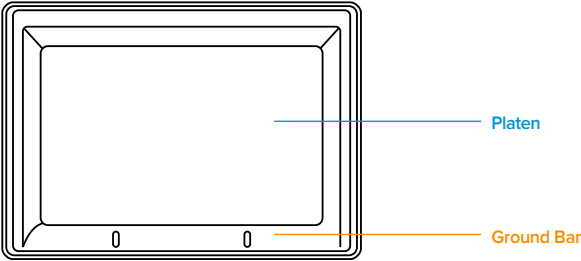


Place your thumbs flat against the platen and the bottom of the thumbs  
thumbs firmly against the bezel to ensure contact.

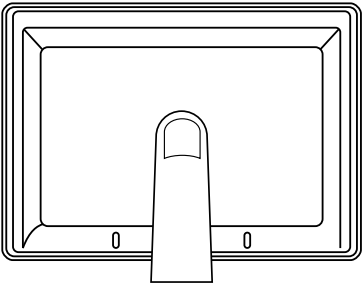
# ROLL SCANNING

## FINGER PLACEMENT

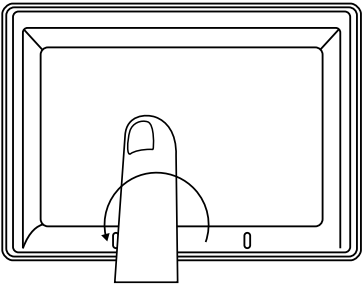
When taking rolled fingerprint captures, place the indicated finger firmly against the **bezel** and **platen** to ensure good contact.



Ready to Scan



Place your finger on the stage between the markers on the bezel, notching that the finger extends slightly beyond the first knuckle.



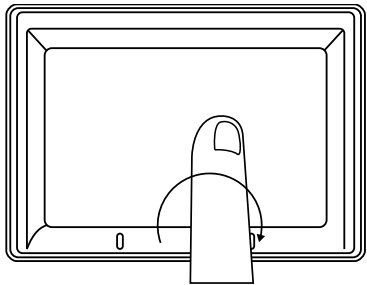
**NOTE:** Optimal scanning requires stopping +/- 45 degrees from the plane.

While maintaining good contact with the platen and bezel, turn your finger 45 degrees to the left.

# ROLL SCANNING

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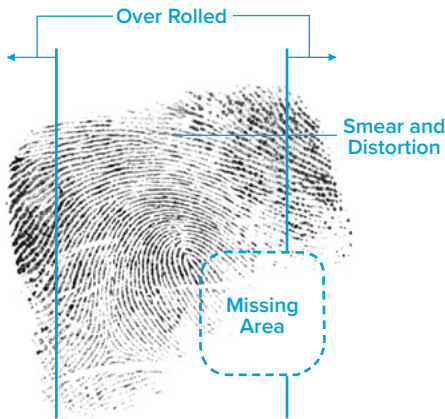
## FINGER POSITION



While maintaining good contact with the platen and bezel,  
now turn your finger 45 degrees clockwise.

Place the next finger in sequence and repeat the steps above.

## EXAMPLES OF ROLLED FINGERPRINTS



Improperly Rolled



Proper Print

# WARRANTY

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All products are guaranteed for 12 months from the date of delivery.

Additional year warranties available. Check with your dealer.

See the warranty here: <https://integratedbiometrics.com/warranty>

# COMPLIANCE

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## FCC

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**Caution:** Any changes or modifications not expressly approved by Integrated Biometrics could void the user's authority to operate this equipment legally under FCC regulations.



# WORLD-CLASS TECHNOLOGY

LES technology empowers energy-efficient, compact, and durable biometric scanning solutions unique to the market. Ready to deploy in any environment under any conditions, Integrated Biometrics' scanners are the choice for high performance applications.

## FIVE-O

Integrated Biometrics, Inc.

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[www.integratedbiometrics.com](http://www.integratedbiometrics.com)