

Improvements in Image Capture for Practitioners

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About Sensors, Surveillance, and Biometric Technologies Center of Excellence

The Department of Justice's Office of Justice Programs (OJP) established the Sensors, Surveillance, and Biometric Technologies Center of Excellence to serve as a specialized technology resource for the 19,000+ state and local law enforcement and corrections agencies across the U.S. The Center of Excellence operates within the existing National Law Enforcement and Corrections Technology Center (NLECTC) system, a component of OJP's National Institute of Justice (NIJ). The Department of Justice selected International Biometric Group (IBG) to operate the Center of Excellence.

About International Biometric Group

International Biometric Group (IBG) is a leading research, consulting and systems integration firm addressing the identity management and security needs of both government and commercial clients. As a vendor-independent firm, IBG designs, engineers and supports solutions across multiple platforms in complex, mission-critical environments IBG is headquartered in New York City, with offices in Washington, DC, San Francisco; and London. Learn more at <http://www.biometricgroup.com>.

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Images provided for evaluation varied considerably in terms of capture quality and conditions, degree of control exercised over the subject, and format. This contributes to false positive and false negative identifications. The following recommendations for image capture will reduce false negative and increase true positive identification rates:

- The capture station should be capable of successfully photographing subjects at adjustable heights by raising, lowering, and/or tilting the camera.
- The capture station illumination should be positioned so that photo portrait shadows are minimized.
- The capture station illumination should be performed so that there is no interference with other operations in the capture station location.
- The capture station should be equipped with auto-calibration and auto-focus.
- The capture station should provide immediate, automatic adjustment to compensate for changing lighting conditions and varying applicant skin tones. The capture station should also permit manual adjustment for lighting conditions, with default capture station settings automatically restored after the photo is taken.
- If the available light is not adequate to capture an acceptable photo, the capture station should have the capability to alert the operator.
- The capture station should be able to prompt the technician when a full frontal image of the applicant's face is not captured.
- The capture station should have the ability to validate that the applicant's photo image is appropriately centered in the image capture area; the capture station should prompt the technician if the applicant's photo image is not appropriately centered in the image capture area.
- The capture station should provide for correct repositioning of the image capture area; this can be an automated or manual process.
- The capture station should be able to alert the technician when the photo image is not acceptable for capture (e.g. too dark, not centered, etc.) and thus require a new capture.