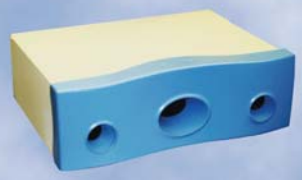
3D FaceCam™

Enabling Facial Recognition

SureMatch 3D Suite
By Genex Technologies

The future of photos has arrived

and it's in accurate, full-color 3D



Introducing the 3D FaceCam™ by Genex:

One of the most important factors in facial recognition is the enrolled picture. If the enrolled picture is inaccurate, the performance will be inaccurate.

Today, regular 2D cameras are used to enroll faces into databases for mugshot recognition. However, 2D photographs only provide a small portion of the wealth of information that is available on a human face.

Genex's state-of-the-art **3D FaceCam™** revolutionizes the way we capture photographs. The 3D FaceCam uses three sensors to create precise, complete 3D face images at light speed.

By capturing the very highly detailed geometric and texture information on a face, the 3D FaceCam overcomes a photo's traditional limitations of pose, lighting, and expression. Now instead of possessing one shot of a person in time, users can create infinite variations of a face with the advanced tools of the **SureMatch 3D Suite™**.

Simple and easy to use, the 3D FaceCam operates similarly to traditional cameras. Capture speed is less than half a second, enabling rapid processing of large numbers of people. 3D FaceCam is also highly accurate, providing details to less than 500 micron accuracy, ideal for facial recognition.

Prepare for the future of facial recognition – 3D is here, and the 3D FaceCam is here to help you capture it.

Applications

- **Law Enforcement** - Offers rapid method of enhancing criminal photos to show varying conditions.
- **Facial Recognition** - Integrates with existing FR sytstems via API and offline processing capability.
- **WatchList Surveillance** - Enhances WatchList databases with additional suspect photos under varying conditions.
- **Access Control** - Increases reliability of match scores by providing additional photos for each authorized user.
- **Retail Applications –** Enables exciting new markets such as laser-etched 3D faces in a crystal cube for personalized gifts.

GENEX TECHNOLOGIES, INC.
www.genextech.com

10605 Concord Street, Suite 500, Kensington, MD 20895 ♦ Tel: 301-962-6565 ♦ E-mail: sales@genextech.com

3D FaceCam™

Enabling Facial Recognition

SureMatch 3D Suite
By Genex Technologies

Features and Benefits

- **High-Speed Capture:** Captures data in 400 milliseconds (critical to acquiring good 3D data for small children).
- **Coverage:** Employs three coordinated sensors to capture a high level of detail around key feature areas (such as nose and eyes) while providing coverage of the shoulders and ears.
- **Minimum Manual Post-Processing:** Automatically cleans 3D data with advanced filters to minimize the need for user intervention during post processing.
- **User Friendly Interface:** Provides rich functionality for your particular application via a simple user interface.
- **3D Data with Texture:** Outputs 3D data with registered intensity or RGB values for use in data modulation and representation.
- **Real-Time 3D Digitization:** Encodes and sends 3D data to the computer instantly, with complete 3D model ready within 30 seconds.

Software Packages

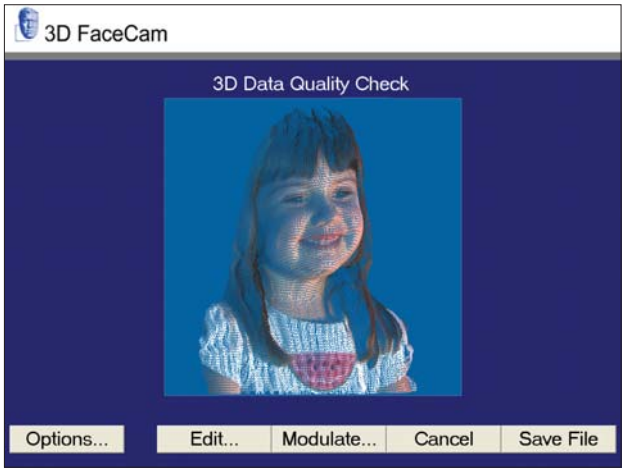
- **Capture Output Formats:** GTI (native format), DXF, IGS, OBJ, PLY, PNT, STL, and VRML; acceptable for use with laser etching or CAD/CAM systems.
- **Interoperability:** 3D FaceCam is supported by leading third-party software companies such as Raindrop Geomagic and InnovMetric Polyworks.
- **Laser Etching Solutions:** Genex can provide a turnkey solution with customized software for laser etching applications. This optional software modulates 3D data points based upon light intensity, for a more visible representation of key features on the face.

Key Specifications

- **Image Acquisition Time:** 400 - 500 msec (depending on settings).
- **Processing Time:** 1 second for quick view, 5-30 seconds for full 3D model (depending on settings).
- **3D resolution:** 307,200 (640 x 480) data points of information (max).
- **Texture Overlay:** Automatic registration of 2D texture information with 3D data.
- **Field of View:**
  Model 500: 510 mm (20") W x 400 mm (16") H x 300 mm (12") D.
- **3D Formats:** GTI* (native), DXF, IGS, OBJ, PLY*, PNT* (point clouds), STL, and VRML. (* Format supports texture overlay.)
- **Size and Weight:** 438 mm (17 ¼") width x 171 mm (6 ¾") height x 356 mm (14") depth; 9.5 kg (21 lb).
- **Power:** 110 - 240 volts AC.

About Genex Technologies

Founded in 1995, Genex Technologies is a world leader in 3D imaging, 3D facial recognition, and intelligent surveillance. Genex provides simple, practical solutions to some of today's most challenging imaging needs.



3D FaceCam™ Software: The simple user interface presents step-by-step screens to guide operators through the capture process .

Capture a 3D face model in 3 easy steps!

Step 1: Position subject for capture.

Step 2: Click "Start" to project calibration light onto subject.

Step 3: Click "Capture" to capture 3D data in only 400 msec.

GENEX TECHNOLOGIES, INC.
www.genextech.com

10605 Concord Street, Suite 500, Kensington, MD 20895 ♦ Tel: 301-962-6565 ♦ E-mail: sales@genextech.com