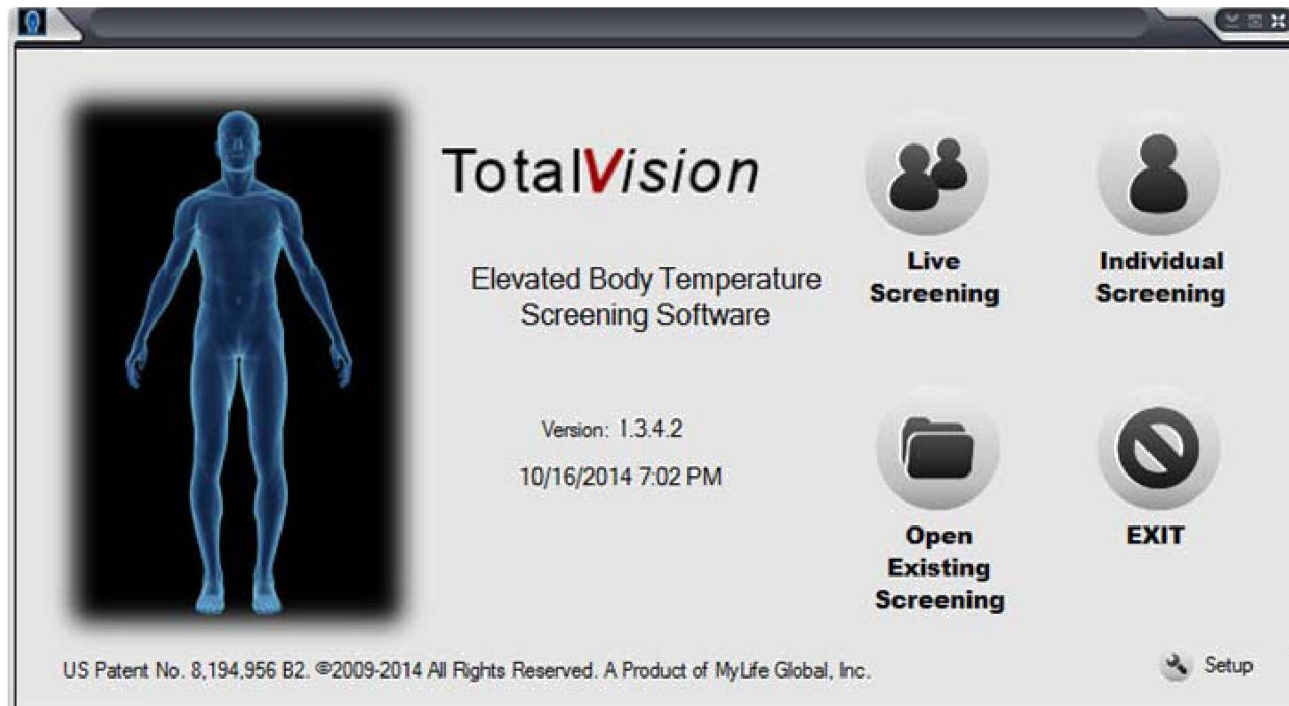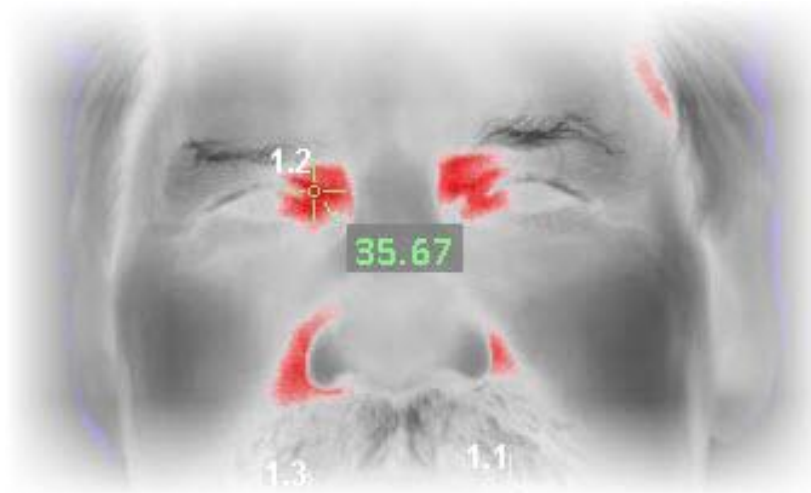# Total*V*ision Elevated Body Temperature Detection

The software is designed for two separate screening modes:

1. **Live Screening** to view individuals from a distance, preferably 10-15 feet from the camera
2. **Individual Screening** for a close view with the person standing 3-4 feet from the camera for more definitive evaluation
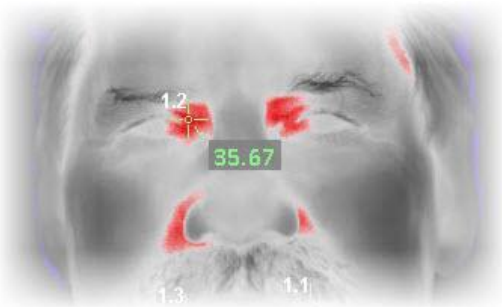
Fever Screening Procedure

Infrared Thermography Basics

The most accurate measurement is achieved when the camera lens is positioned at a **90⁰ angle to the subject.**


The most accurate measurement is achieved when measuring the inner canthus of the eye or the ear canal. Skin measurement on the face or other exposed areas can be altered with sweat, (up to 3⁰C) air flow, clothing, oil/creams on the skin, lighting or other artifacts.

Skin or surface temperature is not the same as core temperature. A person without a fever (core temperature of 98.6⁰F / 37⁰C) will typically demonstrate a thermal reading of 95⁰F / 35⁰C in the area of the inner eye. Therefore a **thermal reading of 99⁰F / 37⁰C would be a truer indication of elevated body temperature.**

Camera
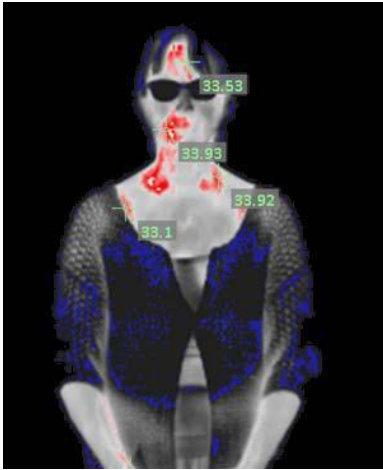
All glass blocks the infrared signal. This image was taken at a distance of 10 feet with a 320 X 240array camera.

The person must remove their glasses. The software is programmed to display 7 spots over the warning temperature which can be diverted to areas with high temperature artifacts, including background lighting.

The camera must be set up in an area that does not include outside windows, reflective surfaces or lighting that emits heat in the imaging view.

Screening Distance

Although screening a crowd from a distance has been shown in the media, this is not an effective method to accurately measure a small area unless the camera is extreme high resolution. Persons with glasses cannot be measured effectively. We do not recommend distance screening.
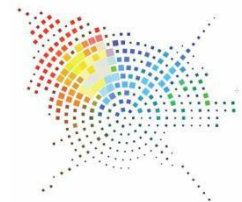
The most responsible and effective method of screening for elevated temperature is to view the person at a distance of 2.5 feet or 76 centimeters from the camera.
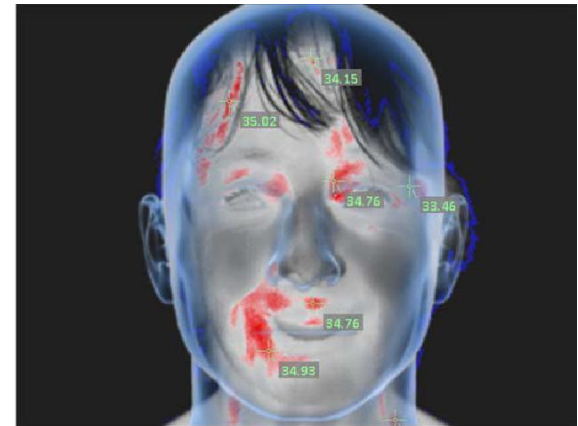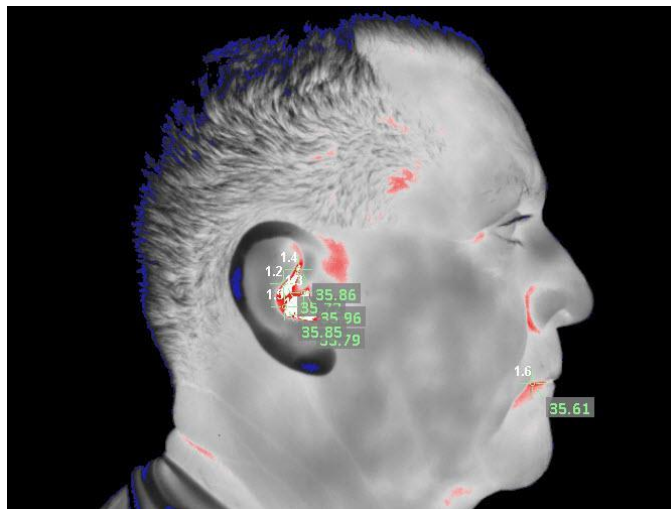
Screening Distance
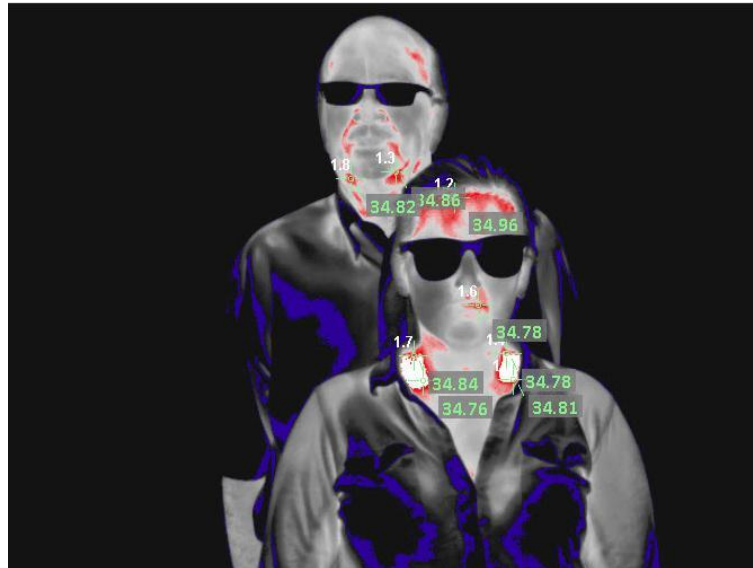
This image is taken at approximately 10 feet from the camera.
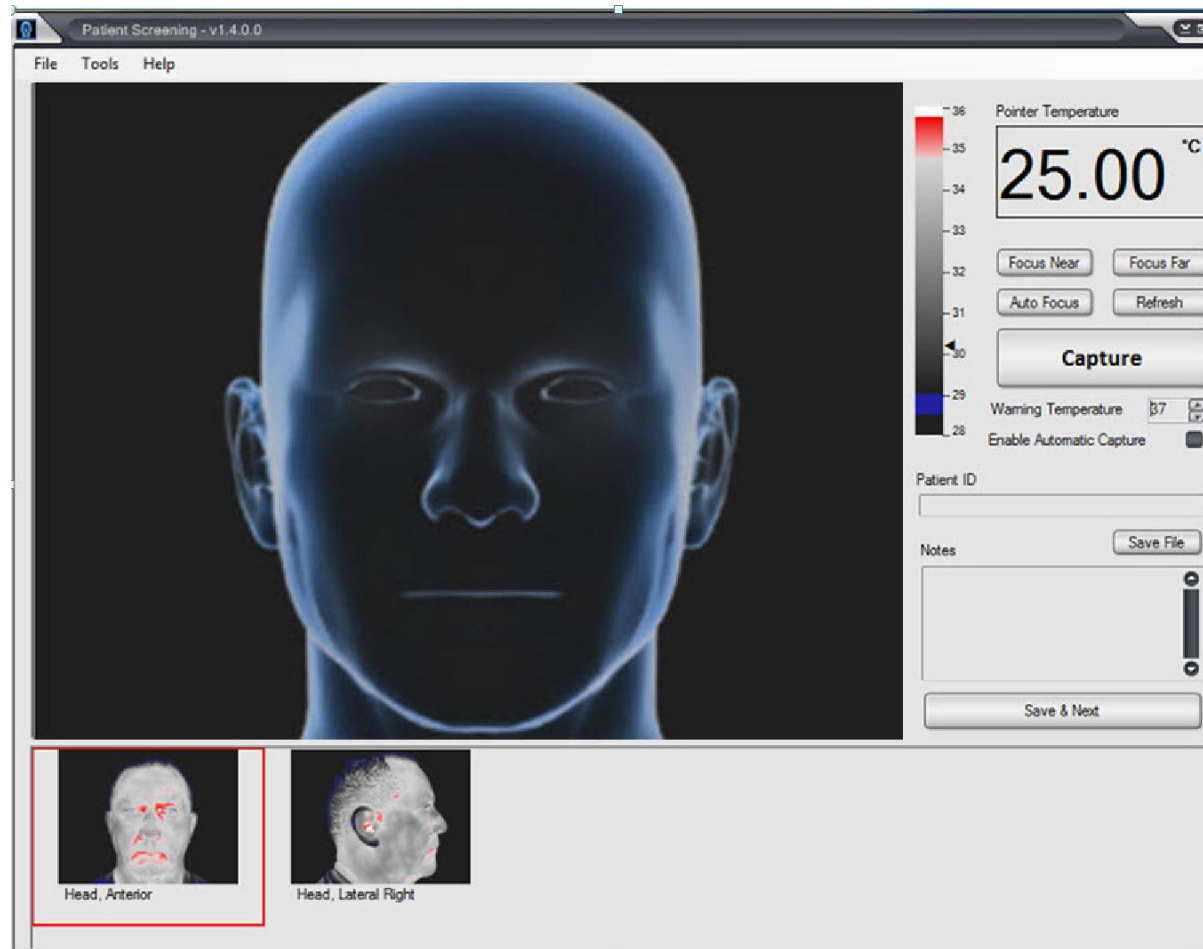
Individual Screening

Recommend 1 view to measure the eyes Or
2 views as seen here to measure the eyes and the ear canal for the most accurate temperature
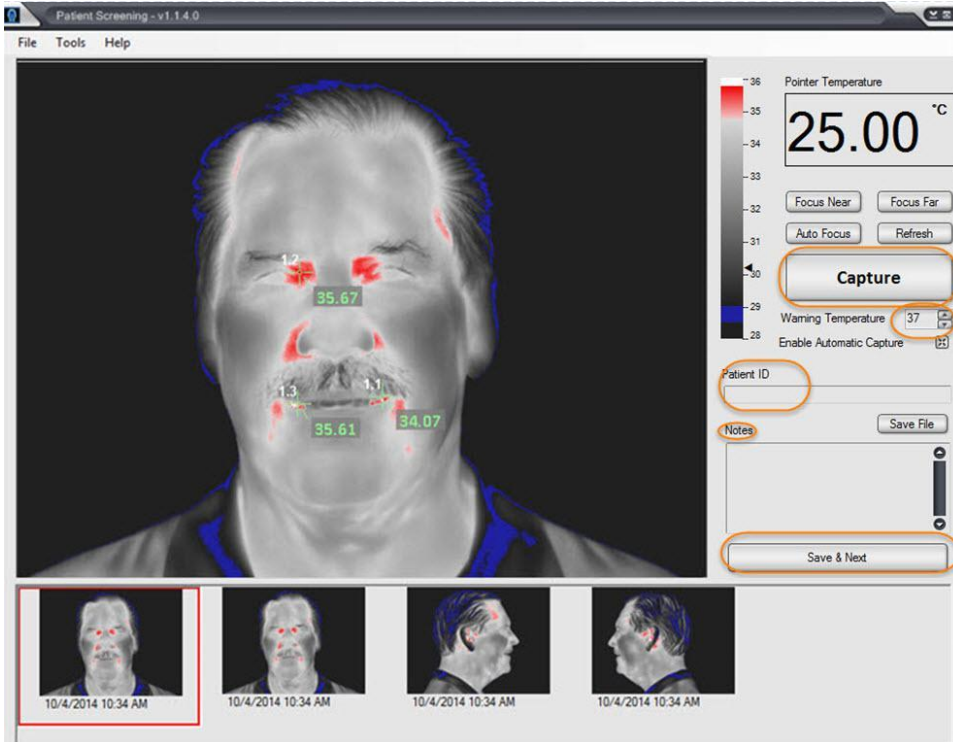
Individual Screening
## On-Screen Recommended Positioning

Individual Screening

This Screen displays:

1. Adjustable *warning temperature*
2. Place for an identifying name or number for documentation
3. Enable *automatic capture* when the temperature threshold is displayed
4. Thumbnail tray of saved images
5. *Save* key for archiving which automatically returns to live feed to save time.
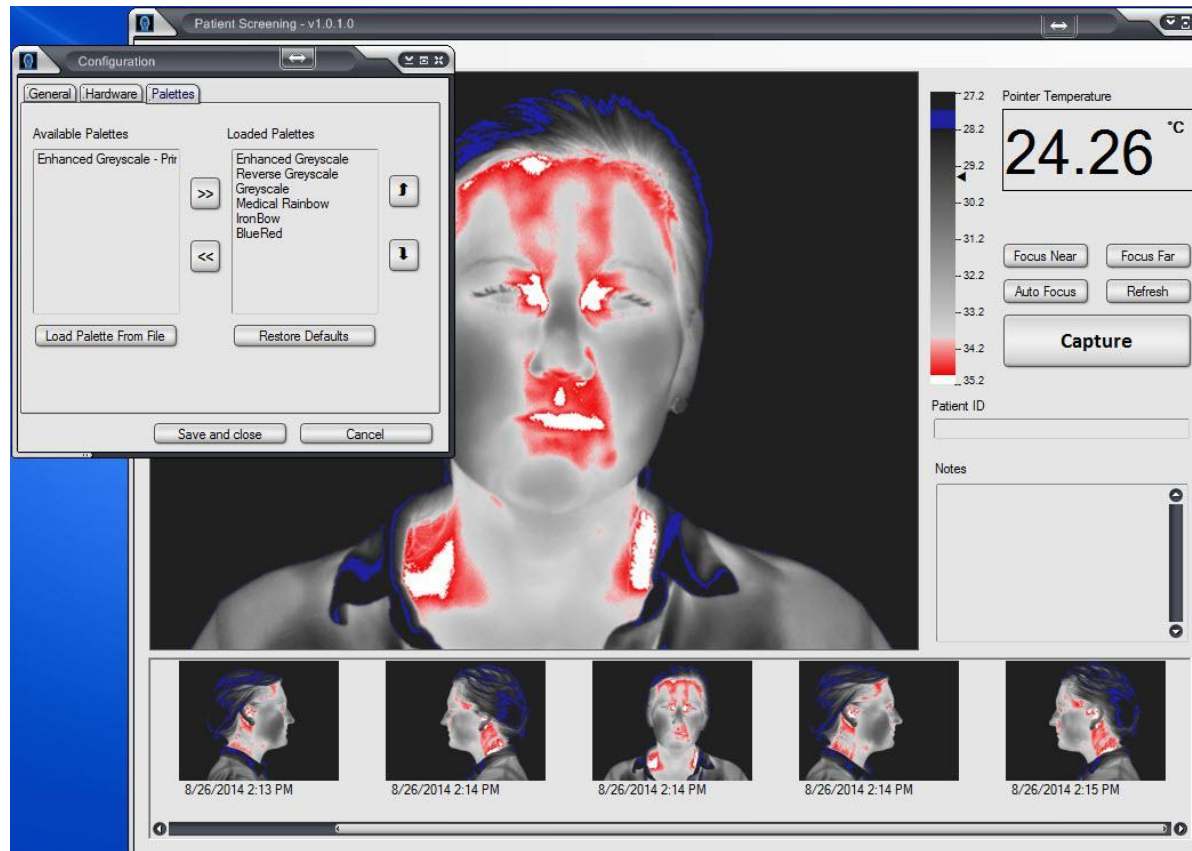6. Space for notes
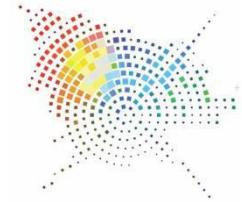
Review Captured and Saved Images

A separate window will open and the screen can be resized to view multiple images on the screen at once. The view will include the temperature measurements.

Select the Preferred Palette

Default Palette

Enhanced Grayscale (red is hot and white is hottest)

Features

- <u>Auto Focus</u> from the imaging screen
- <u>Temperature display</u> options for Celsius/Fahrenheit
- <u>User</u> sets maximum threshold temperature
- Software finds and displays the <u>location of all readings</u> over the threshold temperature.
- <u>Automatic capture</u> when software detects threshold temperature
- <u>Option to save</u> with quick return to live screen
- <u>Color palette options.</u> (Default is *enhanced gray-scale* where hot is red <u>and hottest</u> is white)
- Recommended option settings will be provided

Individual Screening

- We recommend an individual screening to make a more definitive determination of true fever.
- Include 1 or two images: (1) anterior view to measure inner canthus of the eyes or (2) anterior and lateral view to record eyes and the ear canal
- Option to record an ID# or name for archiving
- Quick save button with quick return to live screen
- Instant capture at maximum temperature with audio alarm
- Saved Images can be opened for review

Energetic Health Systems BV

This User Manual is designed to support the TotalVision Medical Infrared Imaging Software application and enhance the performance of various high definition radiometric infrared imaging devices. This software is medical application specific.

Energetic Health Systems BV

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