

VerifIR™

The ability to detect concealed threats at a distance could mean the difference between avoiding and experiencing a catastrophe. Our non-invasive stand-off detection system enables users to identify person-borne improvised explosives (PBIED) and concealed weapons in crowded areas. Using a parallax-free optically fused camera, Sarnoff's newest imaging solution displays real-time EO/IR fused footage across the imagery depth of field. With the ability to detect cell phones, wires, triggers, weapons and explosive devices with and without shrapnel, our compact threat detection system is ideal for any situation where crowd safety is a priority.

Capabilities

- Effective threat range of 40m
- Parallax-free fusion
 - Visible sensor (0.4 - 0.98 μ m) standard full color and chromatic characterization of objects
 - LWIR sensor (8 - 12 μ m) standard through smoke, and textile thermal imaging
- Commercial off-the-shelf (COTS) integrated day/night vision system
- Indoor/outdoor use

Optional Capabilities

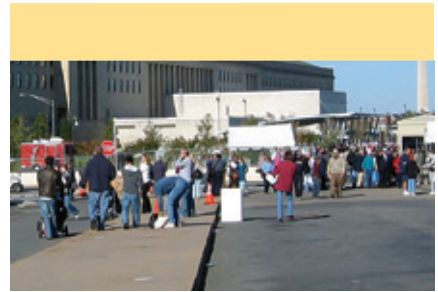
- Image stabilization
- MTI object tracking

Applications

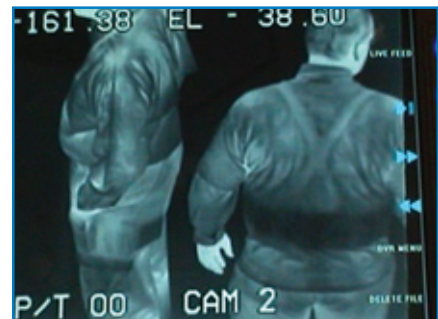
- Checkpoint surveillance
- Crowd monitoring
 - Stadium patrol
 - Civic events
- Military and maritime applications
- Emergency first responders
- Public safety
 - Law enforcement
- Covert operations

Standard Features

- Attaches to all standard tripods
 - 1/4" - 20 mount
- Single channel data output
 - RS170 (NTSC or PAL)
 - Video over Ethernet UDP-IP
- Fusion control through ethernet connection
- 110VAC powered
- System weight: 17lbs
- Threaded BNC connector



Effectively Detect and Minimize Concealed Threats at a Distance



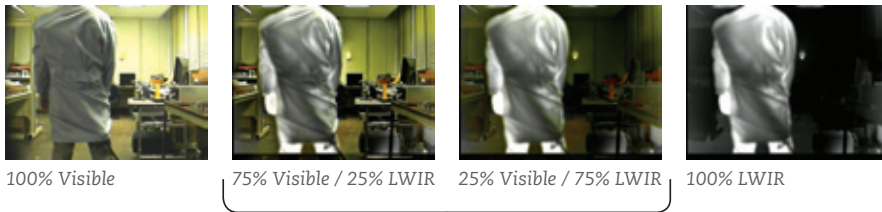
PBIED detected via image fusion



Standard Features

Parallax errors occur when two cameras in two different locations view the same object. Sarnoff's patented parallax-free camera can

seamlessly fuse visible and LWIR inputs into a single image, free of parallax distortion from a distance of 10cm - 100m, anywhere in the cameras' fields of view.



Visible Camera	
Frame Rate	30 frames/sec
Frame Resolution	768 x 494 pixels
Pixel Format	8.4µm x 9.8µm

LWIR Camera	
Frame Rate	30Hz
Frame Resolution	640 x 480 pixels
Detector Pitch	25.4µm
Detector Type	Uncooled VOx Microbolometer

Adjustable Levels of Fusion



Visible light provides detailed information regarding subject appearance, but no indication of concealed objects.



Adjustable levels of fusion enable descriptions of tracked suspects including facial recognition, clothing color and other details not apparent in LWIR-only.



LWIR reveals concealed objects, but provides little information regarding subject appearance.

Contact Us

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SRI International

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