U.S. Army Aeromedical Research Laboratory

Fort Rucker, Alabama

Noise-Immune Stethoscope

NIS

www.usaarl.army.mil

Noise-Immune Stethoscope

The dual-mode hybrid Noise-Immune Stethoscope (**NIS**) is an auscultation device that detects heart sounds without interference from environmental noise.

In the ultrasonic mode, the **NIS** transmits a 2.3 MHz signal into the patient's body through a highly optimized stethoscope head. Due to the Doppler Effect, the signal is reflected from the moving tissues at slightly different frequencies than the 2.3 MHz source. Users of the **NIS** are able to easily switch from Doppler to acoustic mode, which immediately turns body sounds into electrical signals for enhanced performance.

The **NIS** will enable medical personnel to assess abnormalities of the heart, arteries, and lungs in high-noise environments such as during the transportation of wounded Soldiers in medical evacuation (MEDEVAC) aircraft, ground warfare, and Intensive Care Units, where use of a standard stethoscope to assess chest sounds can be difficult.

For more information please visit:
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