**INSTA.FI** 



## Insta ANR

# Active Noise Reduction for Aviation and Demanding Environments





### **INSTA ACTIVE NOISE** REDUCTION

#### **REDUCED RISK OF HEARING DAMAGE**

Insta Active Noise Reduction offers excellent hearing protection for fighter pilots and aircrew. Traditional hearing protection does not perform well in low-frequency military aviation noise environment. By using DSP controlled noise cancelling the Insta ANR system can attenuate frequencies down to 20 Hz. Lowered noise levels reduce the risk of hearing damage, improve radio and intercom intelligibility and improve aircrew performance by reducing the effects of noise on focus and decision making.

#### DIRECT REPLACEMENT TO EXISTING HELMET EARCUPS

Insta ANR can be installed to most standard aviation helmets. It is a direct replacement of existing helmet earcups and can provide up to 30 dB of low frequency attenuation. Insta ANR can be customized to fit many different intercom and helmet systems.

#### PERFORMANCE IN DEMANDING CONDITIONS

Insta ANR system features a dual speaker system that isolates the ANR from aircraft intercom ensuring working communications at all times. Insta ANR has been tested to perform in demanding environmental conditions. The system maintains high performance even during cabin pressure changes.

#### **TESTED AND IN USE**

Insta ANR performance has been verified both in labs and flights. It is in operational use in the Finnish Air Force.

#### **INSTA ANR ATTENUATION VS. SOFT EARCUPS**





Insta ANR fits directly to HGU-55 style helmets



Can be installed to different helmets

#### **FEATURES**

#### Latest ANR technology

- DSP powered Hybrid ANR topology Over 30dB Active Low Frequency Attenuation
- Dual speaker driver system Adjustable attenuation response
- High passive attenuation

#### **Easy integration**

- Standalone pilot equipment No A/C integration
- Separated from A/C intercom
- Battery powered
- Velcro attachment
- Comfort ear seals
- Modular design to fit various platforms

#### NSN: 5965-58-001-4122

#### **TECHNICAL SPECIFICATIONS**

Response	40-5000Hz ±6dB (ANR ON) 70-5000Hz ±6dB (ANR OFF) 90dB/mW@1kHz
Attenuation	15dB (<50Hz), 30dB (63630Hz), >30dB (>800Hz)*
Weight	355g (complete system with batteries)
Interface	Standard U-179A/U audio interface
Power	2xAAA Li-battery, 35hours @100dBc
Speaker	H-143/AIC (19Ω, other impedances available)
Operating conditions	-20°C+50°C Operational -40°C+60°C Storage
Test conditions	MIL-STD-810 (Env.), MIL-STD-461 (EMI), DO-160G (ESD)

\*Variations subject to person and fitment



Headset applications for ground crew and civil aviation