

QUIETPRO® QP400

Honeywell



Intelligent hearing protection and
communication system

All you need to hear

Safe, smart hearing: a soldier's tactical advantage

There's one contributing factor to the fog of war that's often overlooked: the clamor of combat.

“Get back!”

Or was that “Attack!”?

Imagine the danger created for soldiers who have suffered hearing damage as a result of exposure to weapons fire or an IED explosion, and are unable to hear commands or incoming fire. If their hearing is impaired, they and their platoon are at a higher risk of not clearly hearing communications or incoming enemy fire.

The QUIETPRO® QP400 intelligent hearing protection and communication system from Honeywell turns that potential impairment into a tactical weapon. It transforms a soldier's hearing from a point of vulnerability to a tactical advantage.

Based on combat-proven technology, QUIETPRO QP400 is the only intelligent hearing protection and communication system that provides smart personal hearing protection, enhancement, and clear communication throughout the full spectrum of training and deployment operations.

With QUIETPRO QP400, leaders can feel confident that their soldiers maintain full combat hearing readiness before, during, and after deployment, and have an increased quality of life well after service.

QUIETPRO QP400 Benefits

- The **clearest two-way communications** and speech intelligibility in extreme noise
- **“Bionic hearing” technology** delivers fastest adaptive hearing protection for superior situational awareness and understanding in rapidly changing noise environments
- **One solution for seamless transition** between mounted and dismounted mobility platforms
- Maintenance of soldier's **full hearing readiness** before, during, and after deployment

Clear communication essential for understanding and adapting to rapidly changing environments

The ability for soldiers to identify, process, and comprehend critical information, and to communicate clearly in their environment is key to the success of any mission.

Clearest communication and speech intelligibility even in high noise.

Connected to tactical radios and other comms platforms, QUIETPRO® QP400 allows soldiers to communicate without compromising listening quality, even under high-noise situations. It also enables soldiers to speak at a normal level and be heard without picking up environmental noises or compromising speech intelligibility — especially in covert operations.



Always listening, always on.

QUIETPRO QP400's bionic hearing expands soldiers' personal situational awareness, understanding, and communication by adapting to changing noise and enhancing their hearing by amplifying external sounds. A soldier can detect immediate threats in sensitive operations and at further distances, assess rapidly changing environments and potential threats, and make smarter decisions about actions in combat.

Flexible, smart radio communications.

On foot patrol, mounted in a vehicle, or in the air, QUIETPRO QP400 provides full jump-on/plug-in transition throughout all mobility platforms. In fact, QUIETPRO QP400 adapts to the widest range of radio and comms platforms, maintaining simultaneous connections to personal and mounted radios, keeping soldiers networked and connected during all stages of their mission.





QUIETPRO QP400

Helps You Hear:

- **Clear radio communications**, enhancing verbal commands and warnings
- **Face-to-face conversation** in high-noise environments at normal levels
- **Environmental sounds**, including enemy movement or activity, such as footsteps, snapping twigs, absence of birdsong, cocking weapons, etc.

QUIETPRO QP400's Radio

Connectivity Supports:

- **Quick connection/disconnection** cables that allow speedy, flexible connection to personal and vehicle comms
- **Optimum radio interface configuration** that adapts to a wide range of available radios
- **Four-channel/intercom capability** via smart comms hub with dedicated mobility port, that routes audio to connect up to four separate communication channels from tactical radios or mobility platform intercom systems simultaneously
- **New ergonomic design** with push-button interface. Cabling on one side eliminates excess connections
- **Can be used with** mobile telephones, handsets, personal listening devices, and other systems that need to present clear audio to the soldier

Proven protection and readiness

Studies show that the #1 injury in conflicts around the globe remains the same: noise-induced hearing loss. And when conflicts are frequent or protracted, the result is significant erosion in the hearing readiness status of the soldiers involved.

Efforts within the armed forces are taking hearing loss prevention more seriously not only as a health issue, but certainly more immediately as a mission-readiness issue. As a Tactical Communication and Technical Systems (TCAPS), QUIETPRO® QP400 enables soldiers to communicate in combat scenarios without compromising their hearing ability.

QUIETPRO QP400 is your first and best line of defense against noise-related hearing loss — and ensuring soldier readiness at all stages of deployment.



Bionic hearing improves communication

QUIETPRO® QP400 enhances soldiers performance in combat through bionic hearing technologies that heighten their ability to communicate with fellow soldiers and better understand their environment. The system clearly reproduces natural sound, while its ultra-fast digital processor provides active hearing protection in continuous, intermittent, and impact noise environments — seamless to the user.

Superior digital processing.

Exterior microphones constantly analyze surrounding sounds, adapting hear-through continuously to facilitate natural hearing. QUIETPRO QP400's patented digital signal processing synthesizes allowable incoming signals, feeding the user fully optimized sound throughout continuous, intermittent and impulse noise. Result: the clearest communications especially in rapidly changing, high-noise environments.

Automatic fit check.

Upon eartip insertion and system start-up, QUIETPRO QP400 performs a quick calibration check to detect proper fit, validating adequate hearing protection and clear communication transmissions in each ear. It alerts the user if the soldier does not achieve a minimum level of protection and is required to refit.

Fully adaptive hearing protection.

QUIETPRO QP400's bionic hearing expands your soldiers' personal situational awareness, understanding, and communication by not only adapting to changing noises but also increasing hearing thresholds up to 5X normal hearing. This allows soldiers to remain aware of their surroundings, assess rapidly changing environments and potential threats, and reduce further exposures to hazardous noise. The control unit includes volume control buttons, allowing the user to reduce or increase the level of the surrounding sound.

In-ear headset.

QUIETPRO QP400 captures voice through the headset's microphone inside the eartip via air conduction. This eliminates pick up of ambient sounds commonly experienced with external microphones, enabling soldiers to communicate more clearly in sensitive environments and when wearing head protection (e.g., Ops-Core and ballistic helmets, CBRN masks).

Digital Active Noise Reduction.

Our patented digital Active Noise Reduction (ANR) technology delivers truly revolutionary results by continuously monitoring ambient sound, and reducing the levels of noise across the spectrum of frequencies to acceptable levels in real time. This allows soldiers to hear all of the sounds at safe levels, and provides increasing low-frequency attenuation for clear, intelligible communications.



QUIETPRO® QP400 Specifications

Physical Data

| | |
|---------------|--|
| Environmental | Humidity, salt fog, blowing sand and dust, immersion, vibration, shock |
| Usage Temp | -30° C to +55° C |
| Storage Temp | -40° C to +63° C |

EMC/EMI/EMP

| | |
|----------------|---------|
| Immunity | 60 V/m |
| Survival (EMP) | 50 kV/m |

Environment

| | |
|------|--------------------|
| IP67 | 1 meter for 30 min |
|------|--------------------|

Power Supply

| | |
|---------------|-----------------------------------|
| Li-Ion | Rechargeable, one 3.7 V cell |
| Lithium CR123 | Disposable, two 2/3 A 3.0 V cells |
| Battery time | >60 h with typical user profile |

Eartip Attenuation Data (Passive)

NRR 27 Canada Class A(L). Attenuation data tested according to ANSI S.3.19-1974.

| Frequency | 125 | 250 | 500 | 1000 | 2000 | 3150 | 4000 | 6300 | 8000 |
|--------------------|------|------|------|------|------|------|------|------|------|
| Mean Attenuation | 31.4 | 33.4 | 33.7 | 33.5 | 37.4 | 39.5 | 39.7 | 43.7 | 42.4 |
| Standard Deviation | 5.2 | 5.1 | 3.3 | 3.0 | 4.1 | 4.5 | 4.0 | 4.1 | 4.7 |

Weights

| | |
|--------------------|-----------|
| QP400 Control Unit | 290 grams |
| Headset | 36 grams |

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