

INVISIO

Tactical Communication and Hearing Protection Systems

LAW ENFORCEMENT



20 years of Combat Proven Experience at your service

INVISIO is a global market leader within advanced hearing protection and communication systems for security and defense forces with more than 200,000 systems fielded globally. This position is based on 20 years of mission proven experience using cutting-edge technology, and providing industry leading solutions to the most demanding elite units in the world.

INVISIO is constantly pushing the limits of technologies in order to protect and enable professionals to operate and communicate clearly and safely in all environments. During critical operations such as riot control, hostage

situations or rescue missions, the need for hearing protection and crystal-clear communication is crucial to both officer and public safety. Effective communication can make the difference between safely defusing a situation or risking injury to officers or innocent civilians.

INVISIO's core assets are:

- Crystal clear communication
- Effective hearing protection
- Full situational awareness
- Seamless integration



The INVISIO Communication System is based on a range of fully interchangeable headsets and control units. All INVISIO systems feature INVISIO IntelliCable® programmable cables, that enables seamless integration to communication devices.

The INVISIO Solution is Unique

Crystal Clear Communication

even in extreme environments

INVISIO communication systems are developed to handle all sorts of extreme environments including crowds, public venues, demonstrations, gunfire, breaching, vehicles/helicopters, etc.

No matter the situation, INVISIO's cutting-edge technology provides crystal clear communication that is essential for reducing risk to the officer and ensuring mission success.

Seamless Integration

with communication devices and equipment

The INVISIO systems can be tailored to fit any critical operation or scenario. INVISIO solutions are versatile, scalable and cost-effective and can be used across different teams and individuals.

The modularity is based on the patented INVISIO IntelliCable® that enables all equipment to be interchangeable across current and future INVISIO systems. It automatically detects devices such as radios, intercom systems, smartphones, computers and remote PTTs, and sets the audio and system parameters instantaneously.

Full Situational Awareness

even in the most complex situations

The ability to retain full situational awareness is essential for both public and officer safety and mission success. Officers need to maintain natural hearing abilities and still be protected from potentially damaging noises, such as flash bangs, gunshots or explosions, as well as continuous noise from vehicles or helicopters.

INVISIO systems use advanced digital signal processing with an ergonomic headset design to provide the most natural hearing possible – even in extreme conditions.

The INVISIO Solution is Unique

Effective Hearing Protection

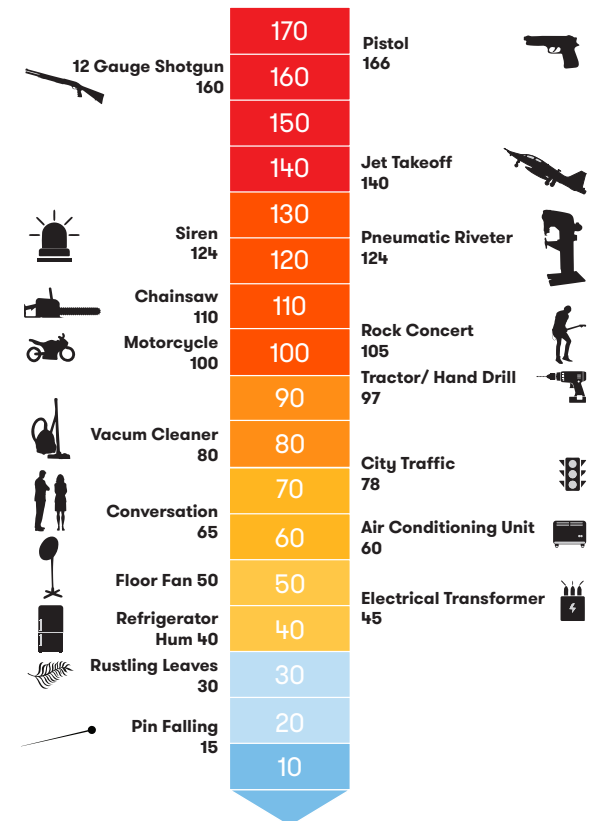
against harmful sounds

There is a significant risk of noise induced hearing loss for law enforcement officers due to the environments they operate in. Officers are exposed to a variety of high or constant noise, including gun fire, explosions, sirens, traffic and radio chatter.

Hearing loss is both a human and financial issue – protecting the officers and reducing agency costs are two sides of the same coin.

Decibel Scale (dBA)*

After prolonged exposure to decibel levels above 80 dB(A) people can start to suffer from permanent hearing loss. INVISIO headsets reduce harmful acoustic pressure so that it does not exceed 85 dB(A).



The INVISIO systems provide a certified hearing protection solution rated at SNR 32 dB and NRR 29 dB to meet the demands of users in high noise environments.



INVISIO X5
In-The-Ear
Headset

Cutting Edge on Every Level

because we know your challenges

INVISIO's product innovation is based on close collaborations and a deep understanding of the users' work environment and specific needs. We know your business, so to speak.

INVISIO builds on the experience from working with elite forces within the military when serving special intervention units resolving high risk challenges such

as counter terror, hostage recovery, VIP protection, site protection during special events and assistance to other police departments fighting organized crime. Officers maintaining public order and protecting people and property, in particular, benefit from INVISIO's unique combination of cutting-edge tactical communication and hearing protection systems while maintaining situational awareness.

INVISIO T7 - -
Over-The-Ear
Headset

INVISIO V10 II
Single Com Control Unit

INVISIO products are used by the most elite customers in the world. In excess of 200.000 systems are fielded and proven in more than 50 countries.

INVISIO

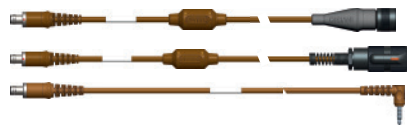
Complete Modularity



INVISIO Officer System

Modular and Scalable

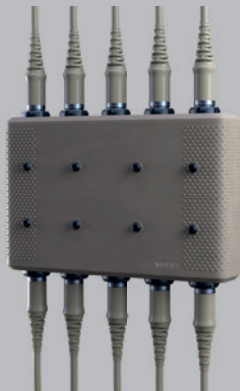
INVISIO solutions are versatile, scalable and cost-effective. Equipment and systems are not restricted to serving one team but can be used across different scenarios and individual needs.



INVISIO IntelliCable®

Plug & Play

INVISIO IntelliCable® enables all INVISIO equipment to be interchangeable and to integrate to other comms devices. It automatically detects the devices and sets all audio and system parameters.



INVISIO Intercom System

Flexible and Mobile

The INVISIO Intercom System enables inter-group communication by plugging their existing dismantled system into any vehicle communication platform.

INVISIO

Complete Modularity

Adaptable

You don't need to change a whole system in order to tailor a solution to a specific need or unit.



Riot control



Bomb squad



Negotiator



Sniper



SWAT team

Compatible

Hundreds of cables and adapters are available for comms with cell phones, tablets, intercoms, drones, sensor/robotic systems, etc.



Drones



Computers



Tablets



Smart phones

Versatile

The Intercom System bridges the gap between the mounted and dismounted officer. Any vehicle communications platform is easily integrated.



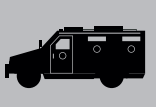
Rescue vehicle



Helicopters



Boats



Ground vehicles

Challenge

- Multiple operational scenarios, including counter-terror, high risk warrant service, barricaded subjects, hostage recovery situations and VIP protection.
- A need for operating different comms sources simultaneously, such as radios, mobile phones and intercom.
- Comms equipment to support operations in whisper-only environments as well as high noise environments.
- Hearing protection – while retaining natural hearing of ambient sound – is essential for mission success.
- Headset systems need to cater to various headgear, such as different helmet types and gasmasks.

Solution Examples:

Headset:

INVISIO X5 – in-the-ear headset
INVISIO T7 – over-the-ear headset, available in headband, neckband or helmet mount configuration

Control Unit:

INVISIO V10 II – single com control unit
INVISIO V50 II – dual com control unit

Remote PTT

INVISIO R30 Wireless Remote PTT

Cables & Accessories

Connection to digital and analogue radio(s)
Connection to devices with 3.5mm jack connector
Adaptors for legacy or 3rd party headsets
Helmet mounts



Challenge

- Communicate in high noise/high stress environment while being hearing protected.
- Ability to communicate with gas mask/helmet/face shield.
- Ability for shield carrier/less lethal grenadier to communicate without taking hands away from weapon/shield.
- Retain situation awareness to facilitate tactical comms and to communicate with civilians without removing hearing protection.

Solution Examples:

Headset:

INVISIO X5 – in-the-ear headset

Control Unit:

INVISIO V20 II – single com control unit

Remote PTT

INVISIO R30 Wireless Remote PTT

Cables & Accessories

Connection to digital and analogue radio(s)
Connection to devices with 3.5mm jack connector
Adaptors for legacy or 3rd party headsets
Helmet mounts



INVISIO Bomb Squad

Challenge

- Quick threat assessment to make critical decisions on the spot.
- Ability to communicate in protective suit, gloves and masks/helmets.
- Interface to comms devices for reliable link to command center as well as unmanned systems, sensors and IT.
- Enhanced situational awareness and hearing protection is key.
- Safety, speed and robustness as key requirements for EOD solutions, sensors and detection systems.
- Ability to use Vox or PTTs outside the protective suit.

Solution Examples:

Headset:

INVISIO X5 – in-the-ear headset

Control Unit:

INVISIO V50 II – dual com control unit with built-in power

Remote PTT

INVISIO R30 Wireless Remote PTT
INVISIO R30 Single Button PTT
INVISIO M30 finger PTT

Cables & Accessories

Connection to digital and analogue radio(s)
Connection to EOD-devices
Adaptors for helmet integrated microphone/
speaker systems
Helmet mounts



INVISIO Sniper

Challenge

- Maintain full situational awareness while being hearing protected at the same time.
- Comfort is key, also for long missions, either with or without wearing a helmet.
- Undisturbed two-way exchange of vital information between sniper and spotter without involving radio communication.
- Reliable radio links to the team leader and support assets.
- Ability to communicate without taking eyes off the target or hands from the weapon at any time.

Solution Examples:

Headset:

INVISIO X5 – in-the-ear headset

Control Unit:

INVISIO V60 II – tri-com control unit

Remote PTT

INVISIO R30 Wireless Remote PTT
INVISIO R30 Single Button PTT
INVISIO M30 finger PTT

Cables & Accessories

Cable connecting two INVISIO V60 II control units (sniper and spotter)
Connection to digital and analogue radio(s)
Connection to devices with 3.5mm jack connector
Adaptors for legacy or 3rd party headsets
Helmet mounts



INVISIO Negotiator

Challenge

- Enable a negotiation team to establish and maintain a monitored and interrupted dialog with the subject, using a mobile phone.
- Allow a “remote negotiator” to call in and participate in the negotiation.
- Allow hand-free, internal comms for the on-site team, while maintaining external comms through one or multiple radios or mobile phones, without disturbing the main negotiator.
- Allow a secondary team (psychologists, high ranking officers etc.) to monitor the dialog in real-time.

Solution Examples:

Intercom System:

INVISIO Intercom System

Headset:

INVISIO T7 – over-the-ear headset, available in headband, neckband or helmet mount configuration

Control Unit:

INVISIO V10 II – single com control unit

INVISIO V20 II – single com control unit

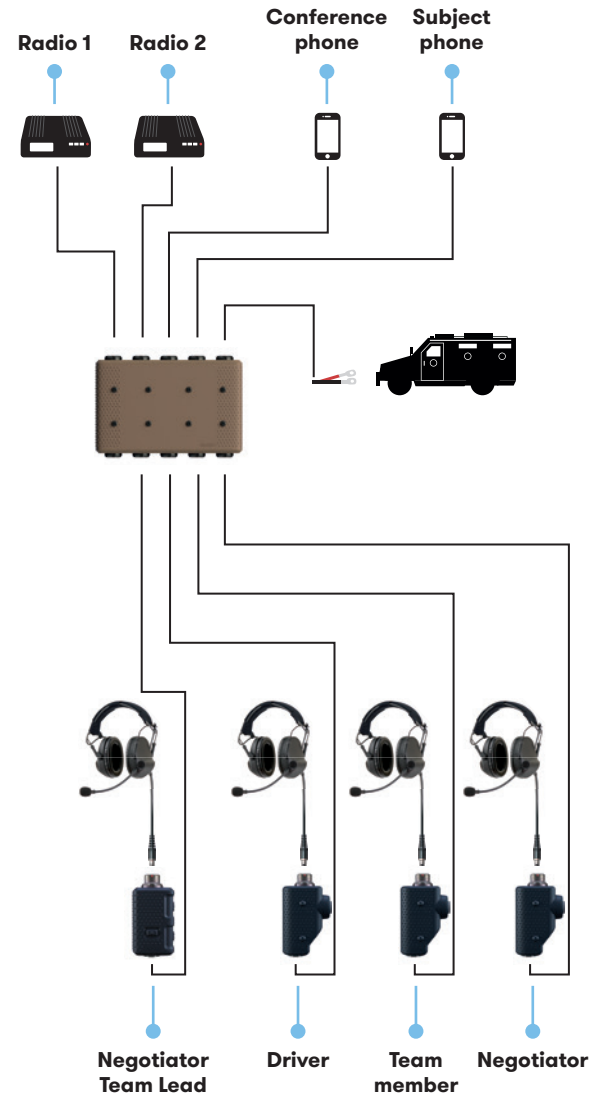
Cables & Accessories

Connection to digital and analogue radio(s)

Connection to devices with 3.5mm jack connector

Connection to recording device with XLR connectors

Power connection



INVISIO T7 – Over-The-Ear Headset

INVISIO V50 II Dual Com Control Unit



Photo credit: Aardvark

Timothy Braginton,
Northern Nevada Area Deputy Sheriff
& SWAT Operator

“The quality of the hear through audio on the X5 headset is unmatched by any other system I have tried, Timothy Braginton explains.

During a 2019 SWAT callout I was positioned approximately 75 yards from a residence in which a subject was shooting at our personnel. I was utilizing a V20 control unit and the X5 headset with the situational awareness hear through at the highest setting.

From my position I was able to hear and understand the subject yelling inside the residence. Other units positioned less than 15 yards from the subject’s location, using our team’s previously issued communications systems with hear through, were unable to hear the subject at all.

“The INVISIO communications systems simply blow alternatives out of the water in quality and capability.”

The quality of the INVISIO hear through system is almost unbelievable when compared to other systems on the market. This capability provides a huge increase in situational awareness and operator capability.”

Tyler Verhaar,
Police Officer at Metropolitan Police
Agency in the State of Washington

“Multiple times during the riots very specific use of force information was broadcast over the radio detailing the commander’s intent, says Tyler Verhaar.

“Without the INVISIO system, officer safety would have been greatly compromised.”

Officers on the line were unable to hear the information due to the overwhelming noise from the crowd. Utilizing the INVISIO systems, officers were able to clearly hear the commander’s intent and follow the orders. Without these systems it would have been very difficult to hear what was expected and to follow the move command.

Additionally, the INVISIO systems provided significant hearing protection for officers from noise and explosions coming from the crowd. Also, when blast balls were deployed, officers were able to immediately go back to standard hearing without ringing or other dangerous hearing deficits.”

Swedish Police
Protecting thousands of police officers
from noise-induced hearing loss.

The number of Swedish police officers suffering from hearing damages has significantly increased during recent years. According to the Swedish Police Union the number of noise induced hearing damages almost doubled between 2013 and 2016*.

Riots and football matches with firecrackers detonating around 170 dB are some of the extremely noisy environments police officers are exposed to. These environments call for a strong need to communicate efficiently while being hearing protected and maintaining situational awareness.

In 2019, the Swedish Police signed two framework agreements with INVISIO for comms equipment with active hearing protection to enable their police officers to work safely and effectively.

Japanese Police
Preparing for the 2020 Olympic
Games

In preparation for 2020 Olympic Games, INVISIO won the contracts for communication and hearing protection systems from the Japanese police force with its Japanese partner FLE.

There is a growing understanding of how important it is to ensure that communication equipment within law enforcement has the necessary quality and features to seamlessly handle large crowds and thousands of excited and agitated spectators during major events such as the Olympic games.

This is not the first time that law enforcement units place orders ahead of large sports events. The French police force, for example, became an INVISIO customer to ensure readiness to cope with the 2016 UEFA European Football Championship.



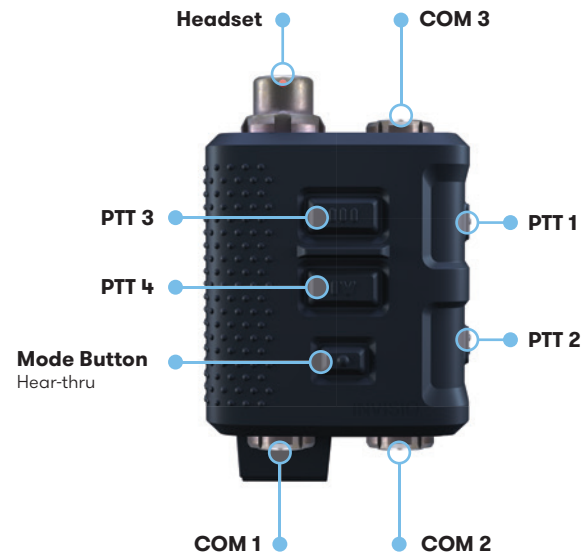
* Source: <https://www.svt.se/nyheter/lokalt/helsingborg/arbetsmiljoverket-kraver-battre-bullerskydd-for-poliser>.

INVISIO Control Units

The INVISIO system is based on a range of control units and headsets that are fully interchangeable. Together they provide crystal clear communication and industry leading hearing protection and situational awareness.

The control units can interface with various headsets along with up to four com sources simultaneously, including radios, intercoms, mobile phones and computers. They start automatically when connected to a radio and provide a simple interface for operation of different coms and hear-thru modes.

The control units are small, rugged, lightweight and submersible down to 20 meters. They power directly from the attached radio, intercom or other central power supply.

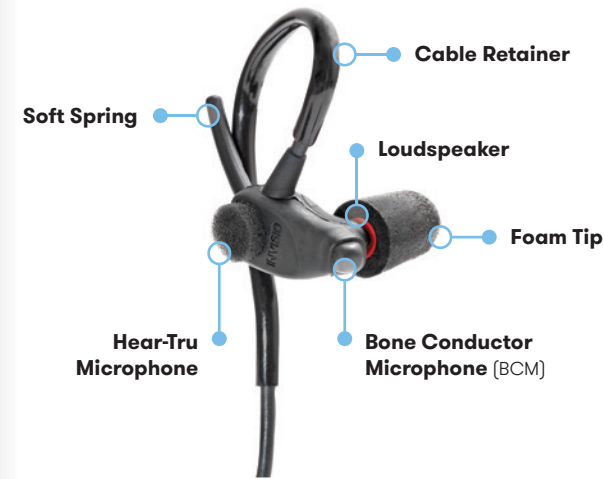


Control Unit	V10 II	V20 II	V50 II	V60 II
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COM Ports	1	1	2	3
PTT Buttons	1	2	4	4
Hear-Thru Button	1	1	1	1
Size	70 x 40 x 27 mm 2.8 x 1.6 x 1.1 in	64 x 40 x 27 mm 2.5 x 1.6 x 1.1 in	70 x 63 x 30 mm 2.8 x 2.5 x 1.2 in	70 x 63 x 25 mm 2.8 x 2.5 x 1.2 in
Weight	127 grams / 4.5 oz	97 grams / 3.4 oz	167 grams / 5.9 oz	145 grams / 5.1 oz
Colour	Black or tan	Black or tan	Black or tan	Black or tan
Immersion	20 meters / 65.6 ft	20 meters / 65.6 ft	20 meters / 65.6 ft	20 meters / 65.6 ft
Power	From comms	From comms	From internal battery or comms	From comms

INVISIO Headsets



INVISIO headsets provide industry-leading hearing protection and situational awareness with maximum comfort and a secure fit. A range of headsets are available including dual in-ear, submersible in-ear and ear-cups with boom mics.

INVISIO in-the-ear headsets are compatible with helmets, eyewear, breathing apparatus and ear muffs. They utilize the INVISIO Bone Conducting Technology where vibrations from the user's jawbone are converted into crystal clear communication.

INVISIO over-the-ear hearing protection headsets offer a significant improvement compared to the traditional cup headset design, as it removes weight and complexity from the headset by centralizing operation of the headset to the INVISIO control unit.

Headsets	M3s	X5	T5	T7
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Style	In-the-Ear (ITE)	In-the-Ear (ITE)	Over-the-Ear (OTE)	Over-the-Ear (OTE)
Hearing Protection	None	Yes	Yes	Yes
(Tx) Microphone	Bone Conduction	Bone Conduction	Boom	Boom
Size (Earpiece only)	13 x 11 x 24 mm 0.5 x 0.4 x 0.9 in	13 x 11 x 24 mm 0.5 x 0.4 x 0.9 in	84 x 110 x 45 mm 3.3 x 4.3 x 1.8 in	83 x 110 x 49 mm 3.3 x 4.3 x 1.9 in
Weight (Incl. connector)	18 grams / 0.6 oz	54 grams / 1.9 oz	360 grams / 12.7 oz	347 grams / 12.2 oz
Colour	Black or tan	Black or tan	Black or tan	Black or tan
Immersion	20 meters / 65.6 ft	2 meters / 6.6 ft	1 meter / 3.3 ft	10 meters / 32.8 ft

* Also available in neckband and helmet mount versions.

Seamless Integration

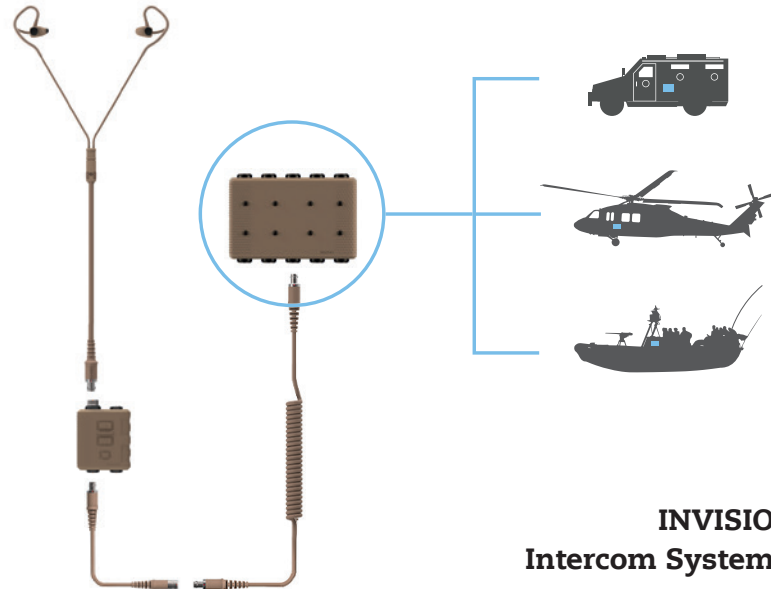
Between the dismounted and mounted officer

The INVISIO Intercom System bridges the gap between the mounted and dismounted officer, making it possible for multiple users and radios to connect simultaneously using their existing dismounted system.

The officer can access all vehicle communications directly

from their INVISIO control unit. There is no need to take off or put on equipment when entering or exiting a vehicle. Any vehicle communications platform is easily integrated with minimal effort. The system is lightweight, plug and play and unparalleled in size; letting units move anywhere while maintaining communication.

INVISIO Officer System



Available Color: ●

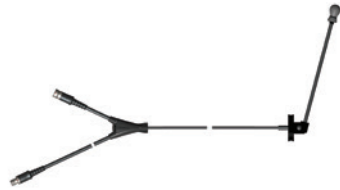
4 Com Ports	Cable Auto-Sensing	
5 User Ports	2 Meters / 6.6 ft Submersible	
1 Power Port	Powers from Battery or Vehicle	
150 × 95 × 27 mm 5.9 × 3.7 × 1 in	520 Grams / 18.3 oz	



INVISIO
Volume Control
Station

INVISIO
Intercom System

INVISIO Accessories



Hybrid Boom Mic

External microphone on a boom arm.



Gas mask splitter cable

Cable for connecting gas mask microphone with an INVISIO control unit.



Foam Tips

There are six foam plug sizes:

- Two lengths – original & short
- Three diameters – slim, standard & large



M30 Finger Mounted PTT

Remote PTT for finger mounting. Submersible down to 2 meters.



Sordin Helmet Mounts

Kit for ARC Rail.



U94 PTT

Single comm PTT with fixed APX or 6-Pin audio connector*.

* Only available for US. Not for use w/INVISIO X5, T5 and T7.



Bluetooth Audio Device

Wireless comms between control units and other comms devices. With or without power supply.



R30 Wireless Remote PTT

Remote wireless PTT for rifle mounting. Submersible down to 20 meters.



Team Wendy Mount

Kit for Team Wendy Rail.



Sordin Supreme MIL CC Headset

MIL-Spec headset with boom mic and internal battery. Also available as hearing protection version only.



R30 Single Button

Remote PTT for mounting on chest. Tactile and easy to actuate button.



PS30 Supply

Power supply for mounting on radio cable or direct connection. Uses AA battery.



INVISIO Serenity Headset

In-ear headset with boom mic. Available with foam or silicone tips and custom shells.



RA5100 Headset

Headset with ANR for both mounted and dismounted use. Reversible boom mic and internal battery.



Lapel mic

Microphone for low and medium noise environments.



INVISIO X5
In-the-Ear Headset

INVISIO V20
Single Com
Control Unit

About INVISIO

INVISIO offers cutting-edge personal communication and hearing protection systems. The systems enable users to operate and communicate safely and clearly in all environments, even under extreme conditions, such as loud noise, heat, and underwater. INVISIO systems consist of headsets and advanced control units that interface to a wide range of communication devices. The systems provide hearing protection while maintaining the natural level of situational awareness. Sales are made via the headquarter in Copenhagen and sales offices in the USA, France, Italy as well as a global network of partners. INVISIO is listed on Nasdaq Stockholm (IVSO).

www.invisio.com

INVISIO®

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