# **INVISIO**

Tactical Communication and Hearing Protection Systems



## 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**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 for 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.

# Effective Hearing Protection

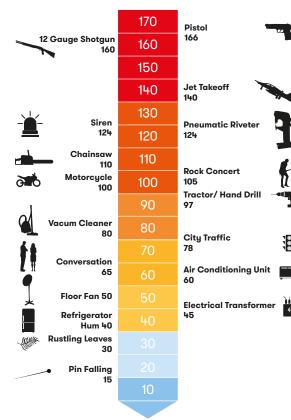
against harmful sounds

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).



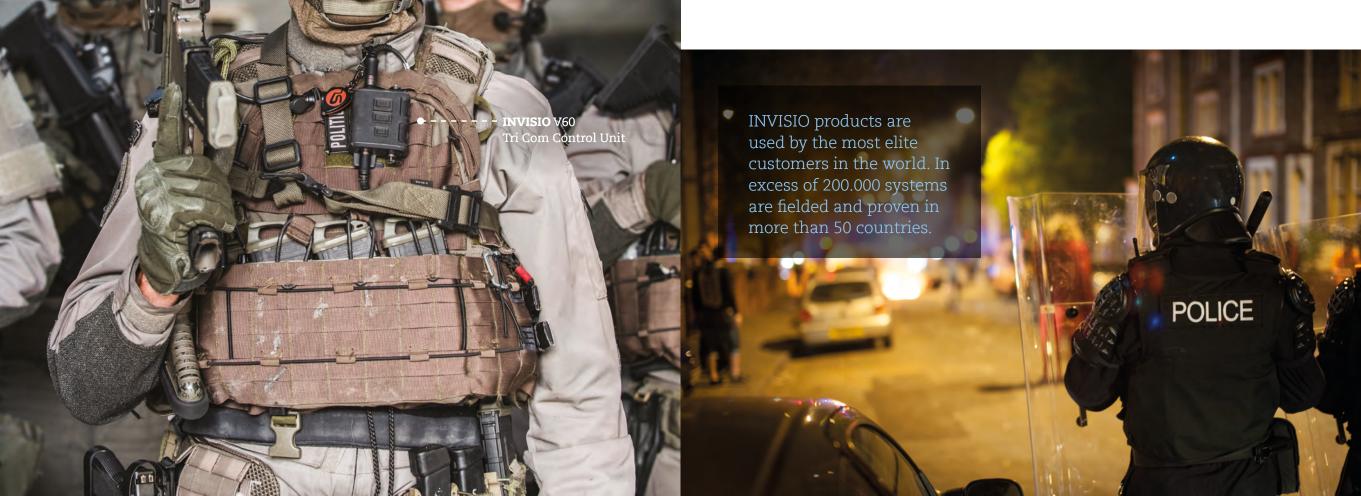




INVISIO's product innovation is based on close collaborations and a deep understanding of the users' work environment and specific needs. We know your business, so to speak.

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** Complete Modularity

## **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.

### Adaptable

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













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.

### Compatible

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



/ Detection

Mine Sweeper Computers



**Tablets** 



**Smart Phones** 



**INVISIO** Intercom System

# **Flexible** and Mobile

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

#### Versatile

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



## **INVISIO** Negotiator

### Challenge

- · Multiple operation 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 whisperonly 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 head gear, such as different helmet types and gasmasks.

#### **Solution Examples:**

#### **Headset:**

INVISIO X5 - in-the-ear headset INVISIO T5 - over-the-ear headset, available in headband, neckband or helmet mount configuration

#### **Control Unit:**

INVISIO V20 - Single Comm Control Unit INVISIO V60 - Tri Comm Control Unit

#### **Remote PTT**

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M80 Wireless 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

- · Enable main negotiator to establish and maintain dialog with the subject, often using a mobile phone connection.
- Provide supporting team with the ability to monitor the dialog in real-time, typically via a listen-only direct mobile phone connection or conference call.
- Establish and maintain radio communication between primary negotiator and supporting team to communicate intelligence, assess the subject and strategize.
- Allow primary negotiator to de-escalate the situation without any interference.

### **Solution Examples:**

INVISIO X5 - in-the-ear headset INVISIO T5 - over-the-ear headset, available in headband, neckband or helmet mount configuration

INVISIO V60 - Tri Comm Control Unit

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

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Headsets

# **INVISIO**Bomb Squad

# **INVISIO**Sniper

#### 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 - dual com control unit with built-in power

#### **Remote PTT**

M80 wireless PTT (including Picatinny rail mounting) M15 body PTT 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













## Challenge

- Maintain full situational awareness and 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
INVISIO T5 – over-the-ear headset, available in headband,

neckband or helmet mount configuration

#### **Control Unit:**

INVISIO V60 - Tri Comm Control Unit

#### **Remote PTT**

M80 wireless PTT M15 body PTT M30 finger PTT

#### Cables & Accessories

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

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# **INVISIO**Riot Control

### 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 - Single Comm Control Unit

#### **Remote PTT**

M80 Wireless PTT

### Cables & Accessories

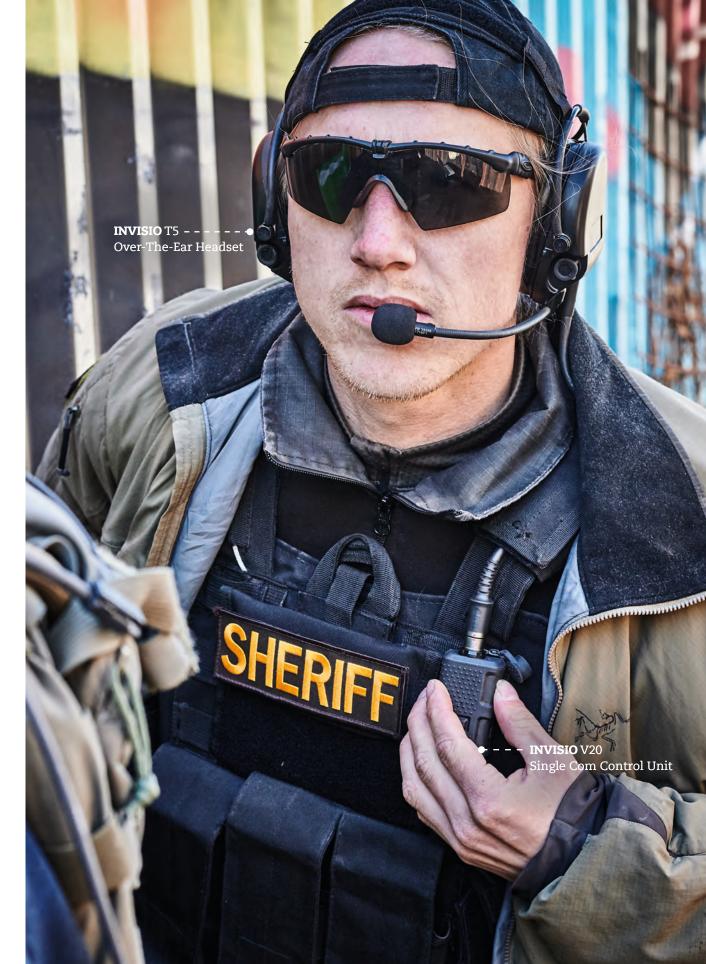
Connection to digital and analogue radio(s)

Connection to devices with 3.5mm jack connector

Adaptors for legacy or 3rd party headsets

Helmet mounts





# **INVISIO**Stories



As a member of the Phoenix Police Department's Special Assignments Unit and their lead sniper, my goal was to find a communications device that simultaneously provided active hearing protection with hear-through and transmit/receive capabilities with our police radios. I had the opportunity to test and evaluate the INVISIO X5 Headset and V20 Control Unit.

In late November 2017 my team was conducting a surveillance operation on three, armed robbery suspects in a vehicle. We set up in a manner to intercept their movement, follow them to a safer location, and make contact at a time/place of our choosing. I was using the INVISIO X5 headset and V20 control unit attached to a Motorola APX5000 radio. This combination provided extremely clear transmission and

reception while also remaining relatively invisible to the general public.

We arranged a location to make contact and the plan was to use a flashbang as a distraction while other officers approached to take them into custody. By accident the flashbang detonated on the front passenger floorboard. I was in the driver's seat and all other windows were closed so I ate the whole thing. I say without a shadow of any doubt that had I not been wearing the INVISIO X5, I most certainly would've wound up in the hospital with burst eardrums.

Hats off to INVISIO for producing a superior product. For those who work in high consequence environments where reliability, clarity, and protection are paramount, the INVISIO X5 is the only choice.

# "Hats off to INVISIO for producing a superior product"



I have been using the INVISIO X5 headset and V20 Controller for SWAT operations ranging from armed barricaded subjects to high risk warrant service and range training. At one time our team responded to a call out regarding a subject who had threatened a neighbor before firing numerous shots and then disappearing. After an open area search the suspect residence was surrounded. The suspect engaged officers with gunfire and during the resulting exchange my teammate fired 4-6 rounds from an

un-suppressed 11.5-inch M-16 from about 1 foot away from my head. The X5 headset worked as advertised protecting my ears from the sound of the gunfire. In the resulting radio transmissions, they were all clear and I experienced no hearing issues.

I am exceedingly impressed with this product and will continue to use it as it has literally proven itself under fire to me as being effective and reliable.

"I am exceedingly impressed with this product and will continue to use it."



## Robert Ylinen, Renton PD

What initially struck me was the ease of adding multiple different types/styles of communication systems into one headset via the INVISIO V60. In addition to the modularity, the V60 allows the user to boost hearing by 10db or decrease 10db depending on the amount of ambient noise and this feature is simply toggle by a button. One press boost 10db, another is a 10db decrease, and one more and it's back to normal. This feature is amazing.

I found the X5 and V60 to be a perfect combo. I had the opportunity to use them during training with explosive breaching, and several team missions. They functioned as advertised. On one occasion, I was a room away when a door charge went off during training and it sounded like a "pop". I was very impressed.



# **INVISIO**Control Units

**INVISIO** Headsets

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, includng 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.





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.

Control Unit	V10	V20	V50	V60
COM Ports	1	1	2	3
PTT Buttons	1	2	4	4
Hear-Thru Button	1	1	1	1
Size	69 × 40 × 27 mm 2.7 × 1.6 × 1.1 in	64 × 40 × 25 mm 2.5 × 1.6 × 1 in	70 × 63 × 30 mm 2.8 × 2.5 × 1.2 in	70 × 63 × 25 mm 2.8 × 2.5 × 1.2 in
Weight	122 grams / 4.3 oz	99 grams / 3.5 oz	170 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

Headsets	M3s	X5	T5
	3	2	
Style	In-The-Ear (ITE)	In-The-Ear (ITE)	Over-The-Ear (OTE)
		.,	

Hearing Protection	None	Yes	Yes
(Tx) Microphone	Bone Conduction	Bone Conduction	Boom
Size (Earpiece only)	13 × 11 × 24 mm 0.5 × 0.4 × 0.9 in	13 × 11 × 24 mm 0.5 × 0.4 × 0.9 in	84 × 110 × 45 mm 3.3 × 4.3 × 1.8 in
Weight (Incl. connector)	18 grams / 0.6 oz	54 grams / 1.9 oz	360 grams / 12.7 oz
Colour	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

<sup>\*</sup> Also available in neckband version and velcro-headband version for helmet mount use.

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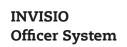


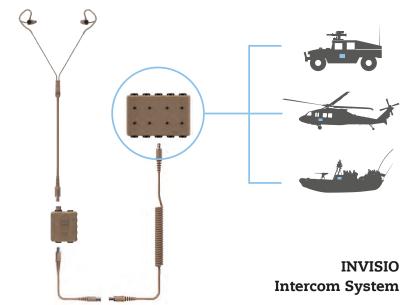
# **Seamless Integration**Between the dismounted and mounted officer

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.

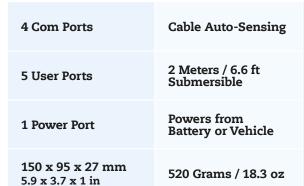
The officer can access all vehicle communications directly

from his 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 their communications.





### Available Color:

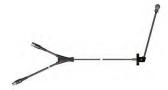






# **INVISIO**Accessories

## **Expanding Capabilities**



**Hybrid Boom Mic** 

External microphone on a boom arm.



**Headset Pouch** 

Molle pouch for any in-ear headset.



**Bluetooth Audio Device** 

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



## Foam Tips

There are six foam plug sizes:

- · Two lengths original & short
- $\cdot$  Three diameters slim, standard & large



**Sordin Helmet Mount** 

Kit for ARC Rail



**PS30 Supply** 

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



M30 Finger Mounted PTT

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



M80 Remote Wireless PTT

Remote wireless PTT for rifle mounting. Submersible down to 2 meters.



M15 Chest Mounted PTT

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



### **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



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