


THE UNIMPORTANT IMPORTANT PART

When working daily with tools, comfort, reliability and usability is key

Chris Kühnle, digital marketing manager, Imtradex

 Headsets are one of the most important tools of an ATCO, as they need to provide a reliable connection to the voice communication system and hence the line to the pilot. The highest standards of safety and reliability must be addressed for a perfect choice of headset, handset and microphones. Every shift, everyday the headset, handset and the respective PTT button will be withstanding a high usage and demanding environment.

Founded in 1996, Imtradex Hör-/Sprechsysteme is today one of Europe's leading manufacturer of headsets, handsets and Push-To-Talk (PTT) buttons. Production and development take place in Dreieich, close to Frankfurt in Germany.

The company develops, produces and distributes hearing and speech systems for use in both classic and special security applications. Innovative production technologies, high quality, reliability and flexibility characterize the performance of the company's products. A very special market supported by Imtradex is the air traffic sector, to which it supplies headsets, handsets and other products for the use of ATCOs in ACC (area control centre) environment, tower or ground handling workers. The products for the air traffic sector are developed specially for daily use in these environments.

Command & Control

Recently Imtradex is preparing for the future with an even greater focus on command and control, just as the air traffic management is. Imtradex's latest slogan, Command & Control, represent the company's and the industry's focus.

Individuality

Since its founding in 1996, the company has been structured and deployed to support the individuality of their customers, such as ANSPs or different voice communication system providers. This has resulted in a tremendous amount of options, which

The PTT13 and PTT19 are ergonomic choices and can be customised to meet the needs of different customers



include: the connector and the pin-out to the voice communication system, the wiring and length to the push-to-talk buttons, different types of PTT buttons including adapted electronics, different functions and headsets, such as monaural or binaural versions with headband or neckband fits and optional splitting – two channels on a binaural headset.

Imtradex is also able to provide different microphone types, such as omni directional, bidirectional or directional types, with noise-cancelling functions, achieved with electret and dynamic type microphones to be the perfect fit for any voice communication system. Each customer is different, so there are more than 1200 different kinds of headsets filling the production system. This also means that for testing purposes and customer sampling each headset will individually adapted to the specific needs of each customer. There is no standard headset.

The different PTT buttons, such as the PTT-13 and the PTT-19 support an

ergonomic choice for each customer. The insight technology is well adapted to the need of the different VCS available. Additionally, the PTT-13 can be supported with a volume control at the PTT, which allows a very easy adaption to the current communication.

Furthermore, a lot of ANSPs and VCS manufacturers focus on their brand while selling their headsets to end user and their teams. This option, to print the company logos on the headsets, including white label packaging is also a well-accepted service Imtradex provides for the headsets, handsets and push-to-talk buttons.

Mission critical technology

The Imtradex products are used in Air Traffic Center, Tower and dispatch rooms in more than 100 countries throughout the world. Especially developed for the use in ACC environments the product safety and reliability is the key factor for an successful long term business with the ANSP's all over the world.



“Civil authorities all over the globe decide for our headsets, as the ATCOs can concentrate on their prior tasks without the need of taking care about their other tools”

Ralf Kudernak

The Imtradex products are designed to meet the need of the ATCO's, without compromising long term reliability. The mechanical design and the ergonomic PTT buttons support a long-term wearing comfort with high usability for daily work. The diversity of different cables and connectors, each for special application, underlines the focus on the aviation and air traffic sector. But not only limited to the daily work, Imtradex supports also the training scenario.

“Since years, civil authorities all over the globe decide for our headsets, as the ATCOs can concentrate on their prior tasks without the need of taking care about their other tools”, says Ralf Kudernak.

Service and support strategy

As a worldwide active company, Imtradex recently started an initiative to meet today's service and support needs. The concept includes different service and support options. The complete Imtradex headsets and push-to-talk buttons are fully service

and repairable, but also with high mean time between failure factors. In close cooperation with business partners and ANSPs, Imtradex is starting to provide service all over the globe.

“This supports our customer in their right choice for our products, such as the AirTalk series or our handset HS3.”, says Ralf Kudernak, CEO of Imtradex.

The service strategy includes different kinds of service contracts, training courses for business partners and ANSPs as well as offers for on-site repairs at customer sites all over the world.

Not limited to after sales support, Imtradex supports each customer also in the pre-sale phase, with individual consulting for the best option and sampling of the individual choice of the customer.

USB technology

For around six years Imtradex has designed their own USB products for use in dispatch rooms and training areas of air traffic control. USB technology is commonly used

in Air Traffic Management for training and simulation. Imtradex supports a variety of key vendors and the training offices with their products, says Benjamin Baier, head of business development at the company. One of the key aspects of Imtradex's USB product is that each device has a unique identifier. What does that mean?

It means that each individual USB device is recognised as different, even when two of the same products are connected. Furthermore, USB technology supports splitting options while using binaural headsets. The USB products, especially the PTT buttons and headsets, have the same look and feel as the operational headsets and therefore provide a positive effect on routines in stressful and dangerous situations. One of the major advantages is that training can more closely resemble the operational situation.

Also, while using dividable headsets with connectors such as quick disconnect, flat disconnect, Binder or Lemo between headset and PTT button, the headsets can be



Above: The AirTalk 5000 is compatible with all major voice communication systems

Right: The HS3 provides crystal clear, reliable communications

used in the operational environments as well as training scenarios.

HS3 - the classic handset

The Imtradex HS3 is a well-known product in air traffic management. The ergonomic and classical design supports easy handling. The big-sized PTT button on the HS3 is a very well accepted feature in the market. Perfectly placed and in a big size, the usability of the PTT is excellent. High quality acoustic components bring a crystal-clear transmission. The handsets support also reed contact functionality and can be adapted to the needs of the user and VCS. Classic design in black colour, but also optional in a red colour for more visibility.



The latest headset

Designed for ATCOs, the AirTalk 5000 comes with a modern design, a round shape of the frame and some eye-catching features. The headband is fitted for nearly every shape and can be adapted with a new screening for improved adjustment. The sound outlet is further improved for an even better speech-focused and balanced sound. The Imtradex microphone types are adaptable to the new AirTalk 5000 with the same outstanding functions. Connected to the push-to-talk buttons such as the PTT-13 or PTT-19, the AirTalk 5000 headset is fully suitable for all major voice communication systems, such as Frequentis, SITT, Rohde & Schwarz or other brands.

The headset is available in a binaural or monaural version. The distance clips, called spacers by Imtradex, are also available for the new developed AirTalk 5000 and can provide a better fit of the headset, while distributing the contact pressure to an upper point over the ear and another surface. The loudspeaker then sits a little differently at the ear. Depending on the shape of the head the individual solution, with or without space can be used.

It is a daily work tool and it needs to be treated as one. Therefore, the headset combined with a PTT button is delivered in Imtradex's air traffic controller bag. The small bag is the perfect place to store the headset and includes a position for a name badge on the outside of the box. ❖