How to give a good demo

Our company strives to provide the best Audio Quality on the intercom market.

One of our most impressive features is our ability to reduce the background noise.

This document will explain you how it works and how to demonstrate it.
Before you begin, you need following items:

An IP Desk Master unit with handset (1008001000)

Two Turbine units from the same range (we recommend two TCIS units)
- Make sure they run the same firmware version

An iPhone or Android Device with this app installed: White Noise

How to demo?

Active Noise Reduction - ANR
aka Active Noise Cancellation or Active Noise Control

Sound is a pressure wave, which consists of alternating periods of compression and rarefaction. A noise-cancellation speaker emits a sound wave with the same amplitude but with inverted phase (also known as antiphase) to the original sound. The waves combine to form a new wave, in a process called interference, and effectively cancel each other out - an effect, which is called destructive interference. *Wikipedia

The CPU in our IP stations runs a powerful algorithm that listens to the background noise and filters it out. The more powerful the CPU is, the better it will perform this task.
Setting up the system

You are free to set this demo up in AlphaCom or PULSE (if you use PULSE, we recommend to have a Turbine station running as Server)

You are free to choose your own extension numbers, but for this guide we chose the following:

IP DESK: 101 - TCIS-2: 102 - TCIS-3: 103

Configure two DAK buttons on your IP Desk Master to call each Turbine station

Login into one Turbine, go to audio settings unit and make sure audio profile is set to normal.

![Audio Settings](image)
Login into the other Turbine, go to audio settings unit and make sure audio profile is set to Noise Environment. Do not set Noise Reduction Level Manually, leave it at 0

NOTE: make sure that both units have the same settings for Speaker Volume, Volume Override Level and Microphone sensitivity. Also make sure other settings are the same.
Give the demo

Open the white noise app on your phone and choose a background noise. We recommend using “Vacuum Cleaner” as it gives very good results.

Place the two Turbine stations next to each other and place your phone speaker central between the station’s microphones.

For the best result, we recommend you to place the IP Desk Master at some distance from the other two units. (5-10meters). You don’t want the original noise from your phone too close to the receiving IP Desk Master.

Demo 1 – Handsfree

This demo is often done when presenting in a large group.

Make sure the noise is running, use IP Desk and push the DAK button of the Turbine unit that has noise reduction disabled. As soon as you push the DAK button, immediately hold the M-Key for about two seconds. This will switch the conversation in simplex and prevents any type of feedback. When you release the M-Key the audio coming through the speaker of the desk unit is from the Turbine station. You will hear the vacuum cleaner noise loud and clear.

You move to the Turbine stations, you face the stations (not the audience) and start talking. The reason you should not face the audience is that they will focus solely on your voice. We do not recommend saying simple things like “hello”, “testing, testing, 1-2-3”. Your audience needs to hear something they cannot anticipate, that will make them focus even more on your voice. Here is an example text you can use.

As you can hear, the noise from the vacuum cleaner is obviously present and interferes with my voice. Imagine I am not present in this room and you only hear the audio from the speaker. This is what happens on the field and the background noise can have a significant impact on the quality of assistance provided by the control room or guard.

End the call by pushing C on the IP desk Master.

Then call the Turbine station that has reduction enabled. Again, call the DAK button and hold M-Key for about two seconds. Walk to the Turbine stations, face away from the audience and start talking. We recommend you talk about how noise reduction works. Here is an example:

You probably noticed immediately how much clearer my voice is and how much easier it is to understand what I am saying. Our Active Noise Reduction feature is a powerful algorithm that detects the background noise and filters it away. This feature vastly improves the quality of assistance provided by security guards and control rooms.

End the call by pushing C on the IP desk Master.

If possible, pick somebody out from the audience and run through demo 2.
Demo 2 – with handset

This demo is ideal for meetings and especially exhibitions, but is recommend in presentations as well as the effect of noise reduction is even more noticeable through the handset. You will choose a volunteer to hold the handset and listen to it.

Make sure the noise is running, use IP Desk, lift the handset and push the DAK button of the Turbine unit that has noise reduction switched off. As soon as you push the DAK button, immediately hold the M-Key for about two seconds. This will switch the conversation in simplex and prevents any type of feedback. When you release the M-Key the audio coming through the handset speaker is from the Turbine station. Give the handset to your volunteer. He/she will hear the vacuum cleaner noise loud and clear.

You move to the Turbine stations, you face the stations (not the person holding the handset) and start talking. The reason you should not face the person is that he/she will focus solely on your voice.  
We do not recommend saying simple things like “hello”, “testing, testing, 1-2-3”. Your audience needs to hear something they cannot anticipate, that will make them focus even more on your voice. Here is an example text you can use.

As you can hear, the noise from the vacuum cleaner is obviously present and interferes with my voice. Imagine I am not present in this room and you only hear the audio from the speaker. This is what happens on the field and the background noise can have a significant impact on the quality of assistance provided by the control room or guard.

End the call by pushing C on the IP desk Master.

Then call the Turbine station that has reduction enabled. Again, lift the handset, call the DAK button and hold M-Key for about two seconds. Give the handset back to the volunteer and walk to the Turbine stations, face away from the person holding the handset and start talking. We recommend you talk about how noise reduction works. Here is an example:

You probably noticed immediately how much clearer my voice is and how much easier it is to understand what I am saying. Our Active Noise Reduction feature is a powerful algorithm that detects the background noise and filters it away. This feature vastly improves the quality of assistance provided by security guards and control rooms.

End the call by pushing C on the IP desk Master.

This demo is absolutely recommended for exhibitions and road shows because there is a lot of other noise around and the IP Desk Speaker is probably not loud enough to fully hear the effect of Noise Reduction.

Good luck!