



Jabra GN

Noise in the open office

Solutions to boost productivity
and take control of unwanted
office noise





Why?

The open office is the most common way to arrange modern workers today, with more than 70% of companies adopting this office approach*. Jabra has conducted numerous studies of the open-office environment and has discovered that the biggest challenge impacting employee productivity is unwanted noise. But it is important to note that not all noise is the same.

* Source: US Statistics BBC January 2017

How does noise affect us?

We find it difficult to focus and work productively when noisy distractions are present. In addition, studies have shown that noise can increase levels of the stress hormone cortisol in workers, ultimately leading to an increase in sick days.

When on a call with stakeholders or customers, background noise can often be transmitted to the receiver of the call. This can be highly distracting to both caller and receiver and, in the worst case, could enable confidential information to be transmitted to the wrong receiver.

How different types of noise impact professionals working in the office

Sound waves are movements of air molecules that our ears translate into sound. Noise, however, is a sound or a conjunction of sounds that is usually unpleasant and disturbing to the listener.

A major factor in the disturbance created by noise is its level, or loudness. The diagram below provides an illustration of typical types of noise and their loudness, as measured by decibels. In the open office, noise levels are typically around 60 decibels. Whilst this is not potentially damaging to our hearing like the 80-plus decibel levels found in busy city traffic, it is nevertheless a source of distraction.

However, not all noise is the same. When we discuss sound, we talk in terms of high and low frequency waves, which create two main types of noise:

High frequency noises are higher-pitched sounds from the open office, such as ringing phones or, more commonly, other people's conversations.

Low frequency noises are rumbly noises in the office, often from noisy air conditioning systems, burbling coffee machines or outside traffic.



Examples	Sound pressure level (DB)
Jet aircraft, 50 m away	140
Threshold of pain	130
Threshold of discomfort	120
Chainsaw, 1 m distance	110
Disco, 1 m from speaker	100
Diesel truck, 10 m away	90
Kerbside, 5 m away from busy road	80
Busy call center	70
Typical open office	60
Average home	50
Quiet library	40
Quiet bedroom at night	30
Background in tv studio	20
Rustling leaf	10
Threshold of hearing	0

Fig 1: Typical sound levels from familiar sources.



How to minimize the disturbance of noise?

Noise is a pain point for users working in the open office, but the type of noise they are exposed to differs. Therefore, we offer solutions that effectively cope with noise in different ways.

Passive noise cancellation

Passive noise cancellation uses the mechanical design of the headset to physically block noise from entering the ear. There are three headset designs that can be used to achieve this: on the ear, in ear and over the ear. Passive noise cancellation generally helps eliminate any kind of noise but is most effective at filtering out high frequency sounds, like people talking nearby.

Active noise cancellation

Active noise cancellation uses advanced microphones to sample the unwanted noise, and then create an identical but reversed sound wave that cancels the noise before it reaches the ear. Active noise cancellation is most effective at removing continuous low frequency noises like office air conditioning and people walking by.

Noise cancelling microphone

With a noise cancelling microphone, the background noise around the caller is filtered out so the receiver only hears the caller loudly and clearly.

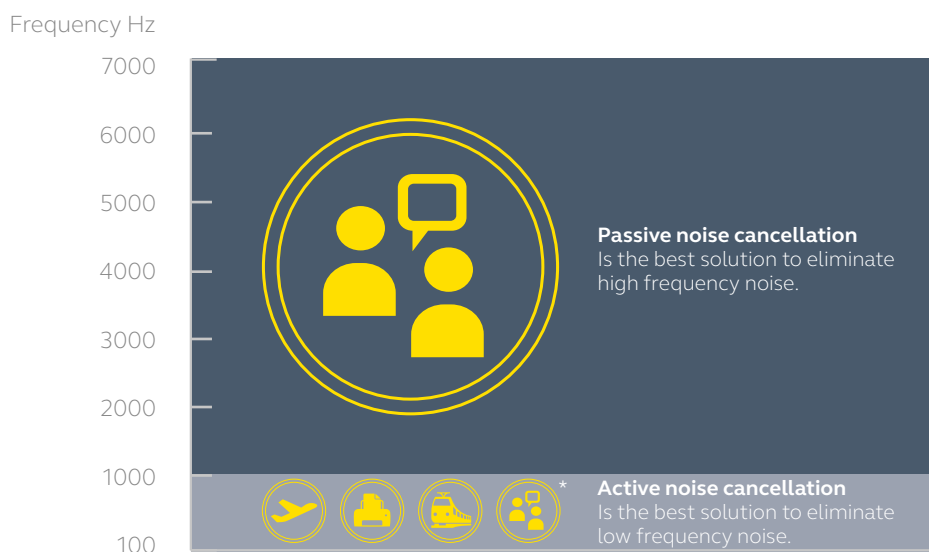
Measuring sound level

By measuring the sound level and displaying the results when it exceeds a certain threshold, people nearby are more likely to lower their voices or move to another area of the office to continue the conversation. This brings the noise down to a reasonable level that allows people to focus and be productive.

Focus on Work music

If you're being interrupted by the hustle and bustle of the open office, you may benefit from listening to Focus on Work music. This music helps listeners focus by using psycho-acoustic phenomena that enhance processing speed and memory retention. Get your first 30 minutes of concentration time through Focus on Work at: jabra.com/productivity

Choose noise cancellation for a purpose



*Low frequency sounds include airplane cabin noise; office noise such as air conditioning, people walking by and keyboard tapping; and commuting noise such as car horns, sirens and speeding cars. Speech noise can go from 100 – 7000 Hz.



What are the solutions?

In Jabra we engineer solutions with the purpose to solve specific pain points of our users.

<p>Jabra Engage 75 Stereo</p>  <p>Jabra Engage 65 Stereo</p>  <p>Jabra Engage 50 Stereo</p> 	<p>Jabra Evolve 80</p>  <p>Jabra Evolve 75</p>  <p>Jabra Evolve 75e</p> 	<p>Jabra Noise Guide</p> 
<p>Jabra Engage Series is engineered to enhance customer satisfaction. Call centric professionals listen and talk to customers over the phone and are dedicated to delivering superior customer satisfaction. Their ability to hold great customer conversations is impacted by:</p> <ul style="list-style-type: none"> Noise from the open office, primarily caused by colleagues talking nearby, which influences call and conversation quality Interruptions from colleagues Lack of information about the customer or the challenge at hand, affecting their ability to conduct the call efficiently Availability and the risk of missing a customer call Comfort, since call centric professionals are on calls for many hours every single day 	<p>Jabra Evolve Series is engineered to be the best professional headsets to enhance productivity in the open office, offsite and when working on the go. This series is ideal for workers who work on tasks and projects and whose primary work modes are concentration and collaboration. Their productivity is affected by:</p> <ul style="list-style-type: none"> Noise. Some work in an open office while others embrace flexible working, so they are exposed to different noise environments Interruptions from colleagues Increasing complexity in tasks and projects Mobility and the need to be productive inside and outside the office 	<p>Jabra Noise Guide. Open offices are noisy offices. Jabra Noise Guide is a portable device that monitors noise levels and makes people more aware of the impact noise has on their work. You can use it to identify especially noisy areas and encourage workers to reduce office noise.</p>
<ul style="list-style-type: none"> • Advanced noise-cancelling microphones deliver crystal clear calls to enhance customer experience • Reduce interruptions and boost productivity with an integrated BusyLight. Passive noise cancellation enhances agents' focus. • Freedom to take customer calls with wireless and corded solutions and a range of connectivity options • Connect to five devices at once and always be available for the next customer call with all-day battery life • Comfortable and lightweight with a choice of wearing options to suit any workstyle, for all-day use 	<ul style="list-style-type: none"> • Passive and Active noise cancellation to reduce noise around you, with world-class speakers for amazing sounding calls and music • Reduce interruptions and stay in the zone in any environment, with an integrated BusyLight that acts as a 'do not disturb' sign • Comfortable headsets with a choice of wearing styles, from traditional over-ear headphones to true wireless earbuds • Works with all leading UC platforms 	<ul style="list-style-type: none"> • See noise levels fall, feel productivity rise • Get visual feedback on noise levels • Measure underlying noise trends

For a holistic evaluation of the noise challenges in your open office, please contact your Jabra representative.

Why Jabra

Jabra has a long history of engineering intelligent audio solutions, designed to improve people's working lives by increasing productivity and enhancing concentration.