



**IMPROVE CONTACT
CENTER PERFORMANCE
AND HEARING SAFETY.**

**8 ways Audio Processors Boost
Agent Productivity.**



WHY AUDIO PROCESSORS ARE A GOOD INVESTMENT

EXECUTIVE SUMMARY

Audio processors play an important role in improving the sound environment in contact centers. When equipped with state-of-the-art audio technology and noise-reduction features, audio processors intensify and enhance the benefits of headsets. This white paper discusses the key features in the Jabra LINK™ 850 audio processor, and how it can boost agent productivity, promote hearing safety, increase customer satisfaction and help contact center managers realize more from their headset investment.

Despite the advent of new acoustic technology, contact center managers continue to struggle with background noise and sound disturbances during calls. An international survey among 250 contact center managers shows that they are concerned about sound disturbances and the effect on agent productivity¹.

Noise can significantly lengthens call times, interrupt conversations, cause incomplete or incorrect transactions or lead to potential lost sales opportunities. What's more, high sound levels can be hazardous for contact center employees, often resulting in an increase in sick days and employee attrition. In short, background noise and telephone and network disturbances can be a costly source of distraction and hinder contact center productivity.

QUALITY HEADSET EQUIPMENT DRIVES PRODUCTIVITY AND SAFETY

Investing in technology and audio devices such as quality headsets is usually the first step contact center managers take to combat background noise and create a more productive and satisfying work environment.

Audio processors play an important role in improving the sound environment in contact centers. Audio processors help increase the power of headsets. When equipped with state-of-the-art audio technology and noise-reduction features, audio processors can intensify the benefits of

quality headsets, promote hearing safety and enhance overall performance.

This white paper explains how choosing an audio processor helps improve the sound environment in contact centers, and presents 8 reasons why using Jabra headsets with Jabra LINK 850 audio processor is a smart solution.

1. NOISE CANCELING HEADSETS - THE FIRST STEP TO INCREASED PRODUCTIVITY

Choosing a quality headset is the first step to improving agent performance and customer service.

Practically all headsets today have noise canceling features; however, very few manufacturers are able to optimize all aspects of the headset to ensure the optimal noise canceling capabilities.

Noise canceling and reduction occurs in the microphone, and the quality of the microphone transmitter is what ensures optimal sound and noise canceling capabilities. The closer the microphone is to the mouth, the better the noise canceling capabilities and sound quality. Therefore, the design of the mechanics around the microphone, such as the shape and flexibility of the boom arm and boom tip, are also important for ensuring optimal noise canceling and quality sound.

2. ACOUSTIC SHOCK PROTECTION FOR SAFE SOUND

The safety and well-being of your call agents is vital to the success of your business and cannot be compromised when selecting a headset solution. Sudden high-pitched sounds coming from the telephone network and other loud disturbances can cause hearing damage or hearing loss. Safe, quality sound enables a noise compliant and productive working environment for agents all day.

The Jabra LINK 850 audio processor is equipped with PeakStop™ – an advanced technology that protects against sudden high pitched noises emitted from the telephone network and VoIP. PeakStop is an electronic peak control gateway (transistor) that does not allow excessively loud sounds to pass to the ear.

¹ CREATING THE RIGHT CONTACT CENTER WORK ENVIRONMENT: A study of the opportunities and challenges in creating the right sound environment for contact center employees, Jabra and Frost & Sullivan, December 2011

Unlike other audio processors, the Jabra LINK™ 850 attacks the sound burst instantly – within 32 milliseconds – far below most recommended limits – and removes potentially harmful sound spikes before they reach the headset speaker. The audio processor keeps the sound within the safe range until it registers that the sound level is stable and then releases it again. PeakStop actively protects the user by keeping the absolute sound level and the energy of the peak in the safe zone at all times, without compromising audio quality.

As a result, the headset user will never be exposed to the full effect of the peak, and consequently, the risk of harming the sensitive mechanisms of the ear is minimized.

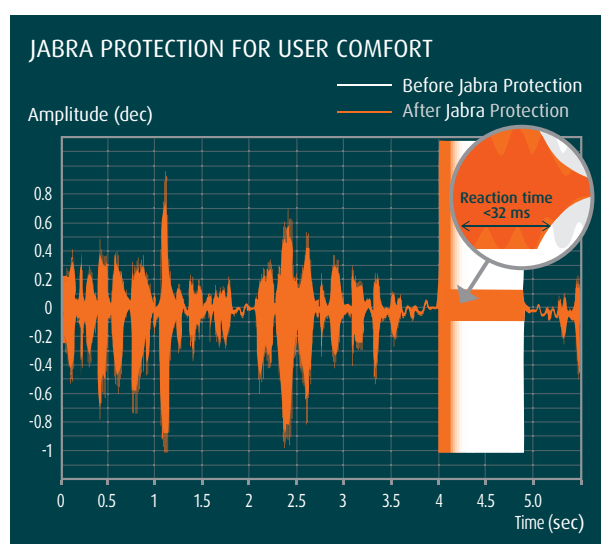


Fig. 1. PeakStop. Sudden shrill sounds (> 2000Hz) coming from the telephone network can be harmful. PeakStop technology immediately removes potentially harmful sound spikes before they reach the headset speaker, and keeps the sound level within the safe range until it is stable before releasing it again.

3. OCCUPATIONAL HEALTH AND SAFETY - NOISE AT WORK COMPLIANCE

More and more countries have health and safety regulations and guidelines to ensure companies provide a safe and healthy work environment for their employees.

The Jabra LINK 850 audio processor protects the hearing and well-being of the headset user. The Jabra audio processor exceeds local compliance and legislation regulations, including the EU Noise at Work Directive (Directive 2003/10/EC) and leading US recommendations, enforcing an upper maximum exposure limit of 85 dB(A) (time weighted average over a full working day).

4. DIGITAL SIGNAL PROCESSING (DSP) FOR CLEARER SOUND

Clear sound is important for call efficiency and accuracy, and providing superior service. DSP technology optimizes sound performance by filtering out distracting background noise, enabling automatic volume functions and adjusting tone levels, thereby reducing call handling time and potential misunderstandings.

Using a sophisticated digital signal processing algorithm, the Jabra LINK 850 audio processor is able to shape and adjust the sound that is coming in and out of the audio processor automatically. For example, if the phone system is providing a bad signal, the audio processor removes the hiss or white noise, delivering a clear signal for the agent and caller. Audio processors without DSP technology transmit everything that the audio processor picks up, including background noise and white noise.

5. DYNAMIC VOLUME CONTROL ENSURES HEARING COMFORT AND SAFETY

Busy contact centers must deal with constant background noise which makes it hard for agents to hear the caller. Turning up the volume can result in sound distortion and make it more difficult to hear what is being said. The Jabra LINK 850 audio processor delivers dynamic volume control that automatically adjusts call volume to a comfortable level with no distortion. Agents can hear the caller without compromising sound quality – or hearing safety.

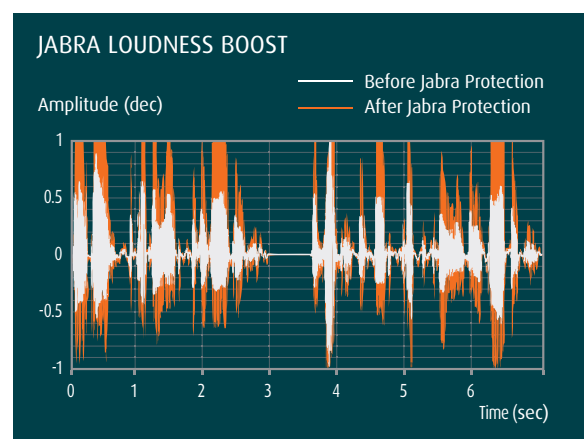


Fig. 2. Dynamic Volume Control adjusts call volume to a comfortable level automatically – and with no distortion – making it easier to hear what is being said even in noisy environments, helping to reduce call handling time.

6. LINE QUIETING REDUCES ANNOYING DISTRACTIONS

It's not always surrounding noise that distracts agents and callers. Network noise disturbances can also be disruptive. Crackling, buzzing and hissing sounds over the phone line are distracting and decrease call handling efficiency. The Jabra LINK™ 850 audio processor provides Line Quieting. Enabled by DSP technology, Line Quieting improves the incoming signal by removing the incoming noise from the phone network, so agents can complete their calls faster with fewer distractions.

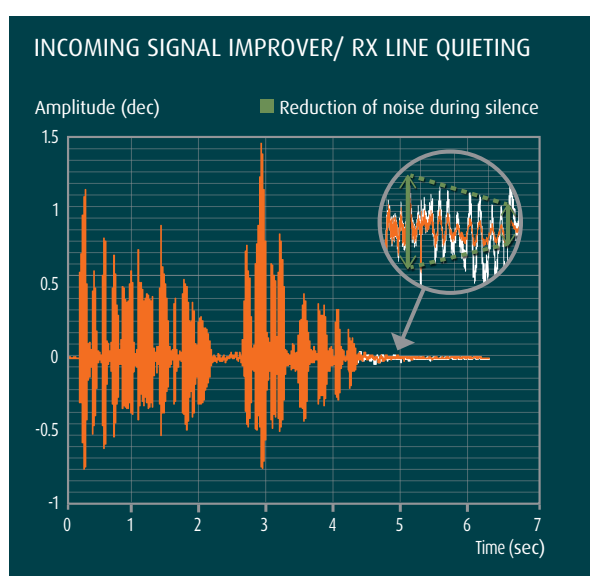


Fig. 3. Line Quieting. Advanced DSP technology improves the signal by removing incoming noise from the phone network helping agents complete calls faster.

7. TONE CONTROL EQUALIZER ENSURES ALL DAY HEARING COMFORT

Every person is different. What may be easy to hear and sound pleasant and comfortable to one person may be faint or sound harsh and sharp to another. That's why it's important to choose audio processors and headsets that can be adjusted to match the needs of the user.

Leveraging the extensive hearing aid development experience from GN Resound, the Jabra LINK 850 includes a unique feature that is similar to the tone control equalizer on a stereo audio processor. The Tone Control Equalizer allows agents to adjust the sound of their headset to the level of crispness and clarity that suits them best – for all day hearing comfort and greater productivity.

CLARITY TONE / EQUALIZER TREBLE BOOST

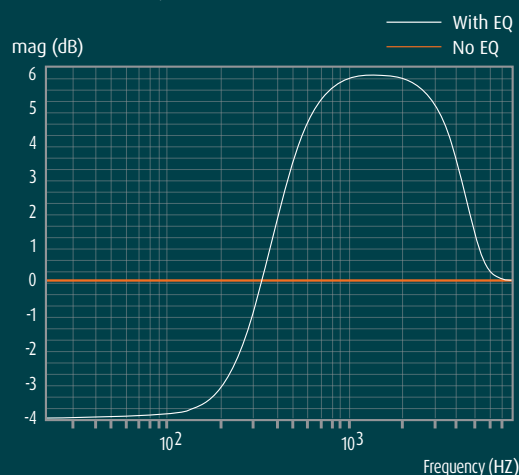


Fig. 4. Tone Control Equalizer enables agents to adjust the audio frequency of their headset to the level of crispness and clarity that is most comfortable for them.

8. SOFT SQUELCH ENHANCES THE CALL EXPERIENCE

Like most businesses today, contact centers must deal with tighter budgets. This can mean more agents crowded together in small office environments. And, if the headset microphone is not placed correctly, callers may hear other agents talking, which distracts from their own conversation. This can have a negative impact on service and the caller's experience.

Audio processors like the Jabra LINK 850, which provide Soft Squelch capabilities, can significantly improve the call experience. It's an intelligent sound management device that detects when the agent is not talking, and automatically lowers the microphone signal reducing outgoing background noise. The caller experiences a quiet pause rather than annoying background chatter. The result is a more personal conversation and a better call experience.



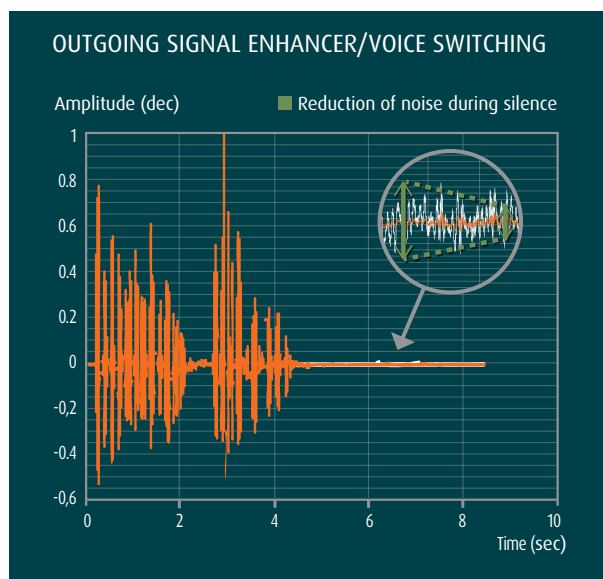


Fig. 5. Soft Squelch. When the agent is not speaking into the microphone, the Soft Squelch feature automatically lowers the microphone signal, thereby reducing the transmission of disturbing background noise.

SUMMARY

Despite advances in audio and headset technology, contact center managers remain concerned about background noise and the effect sound disturbances have on agent productivity, well-being and their ability to deliver superior customer service. Added to this are the pressures to contain costs and get more from the resources and systems they already have.

Audio processors are designed to enhance the capabilities of headsets. With the right features, audio processors can extend the value of headsets by delivering real business benefits. The Jabra LINK 850™ audio processor is a reliable choice for your contact center. It provides powerful features that improve audio quality, reduce call handling time and promote hearing comfort and safety. With the Jabra LINK 850 audio processor, contact center managers realize increased productivity with shorter calls, higher customer satisfaction with faster, accurate responses and less employee attrition with better comfort and higher safety. The Jabra LINK 850 enables contact centers to realize the full value of their headset investment.