

# BENEFITS OF BETTER SOUND MASKING

Conversational distractions have been shown by numerous studies to be *the number one cause of lost productivity* in open office environments.

## Speech Privacy Benefits Quantified

- Focus can be improved by 40%
- Distractions can be reduced by 51%
- Stress can be reduced by 27%
- Error rates can be reduced by 10%
- Productivity increased by 10% - 40%

10% 20% 30% 40% 50%

The modern office is a dynamic environment. Due to the combination of rising real estate prices and the recognition that team-based solutions are often more valuable than the sum of their individual parts, the open plan office is here to stay.

These ROI gains come at a cost, though. Team members don't sit quietly at their desks. Focused, highly productive teams hold impromptu meetings, discuss current projects and solve complex problems – all good things. But with few walls or dividers to block or absorb sound, voices travel much further than their intended audience. The result is that one team's collaboration (or idle talk) is distracting and stress inducing to the rest of the workspace, and overall production suffers.

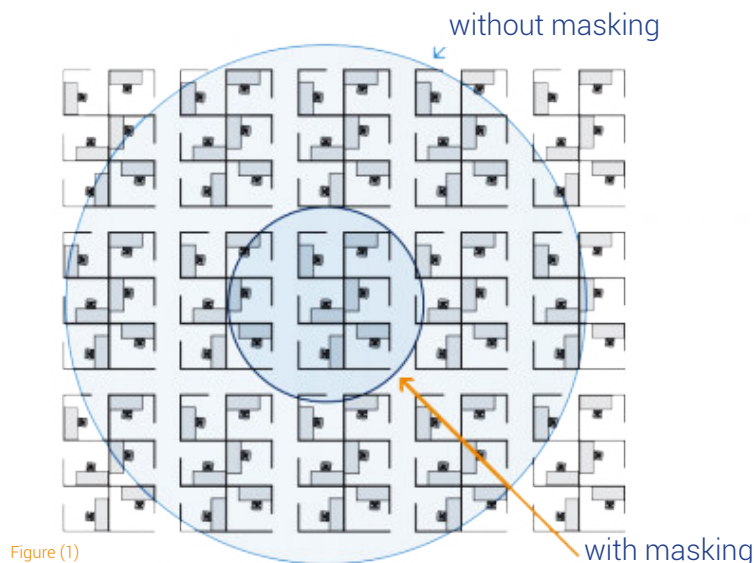
## How to Achieve Speech Privacy

Like light, sound is a wave and spreads out in all directions from its source. Hard surfaces reflect it, walls block it, and soft surfaces absorb it. Other sounds can cover it up. But unimpeded, noise can travel pretty far. Absorb, Block and Cover – “The ABCs of Speech Privacy” – represent the three ways you can improve your acoustic environment. Of the three, Covering typically offers the most improvement per dollar spent. So any acoustic privacy plan will typically begin with a modern sound masking system.

## How Sound Masking Works

Sound masking has been around for more than 40 years and is widely used in Fortune 500 companies, small businesses, medical facilities and government institutions. Modern sound masking systems produce a broad spectrum, targeted sound that is intended to be both comfortable to workers and effective in covering and “filling in” the structured sounds of human speech.

The VoiceArrest™ system is designed to provide the optimal sound masking, while preserving the comfort of the occupants, through precise, patented, automated adjustment of the masking sound to the specific characteristics and noise conditions of each work area.



## Rapid Calibration, Accurate Results

With the VoiceArrest™ system, a masking zone can be completely calibrated in less than one minute, thanks to the MPS™ automatic calibration process (US Patent 7460675 B2). This automatic adjustment is done not only on 1/3 octave bands, but on a 340 narrow band spectrum. It is quick, precise, and provides a sound masking spectrum that is unparalleled in its consistency and comfort. The calibration quality is measured by the system’s integrated frequency analyzer. At a glance, it provides indications as to whether the masking generated is in complete conformity with the sound spectrum sought.

## State-of-the-Art Sound Masking

### Automatic Equalization Process

#### Rapid Calibration, Accurate Results

A 340 narrow band equalization (instead of the usual 20 1/3 octave bands) ensures the production of a uniquely smooth, regular and comfortable sound masking, irrespective of the acoustical characteristics of the work space. (US Patent 7460675 B2)

### Real-Time Adaptive Adjustment

#### Rapid Calibration, Accurate, Undetectable, Effective Volume Modifications

The VoiceArrest™ system identifies ambient noise variations in real time, using ceiling sensors and an advanced signal-processing procedure, and continuously automatically adjusts the masking volume. (US Patent 8116461 B2)

### Networked System Flexibility

#### Cost Efficiency of Centralized Systems

The VoiceArrest™ system is very flexible with respect to the area of the masking zones, achieving greater confidentiality in all environments.

## Additional Advanced Features

- Graphic control interface
- Handheld control
- Paging and music
- Individual speaker control
- Gradual ramp-up
- Monitoring system
- Calendar adjustment
- LEED design

## Unique Automatic Equalization Process

### How Sound Masking Works

The challenge: To produce optimum sound masking for all work space characteristics. Parameters such as size, type of ceiling, wall coverings, and furnishings have a direct influence on the propagation of sound masking. If the masking system is not properly calibrated to the specific conditions of the room, it becomes ineffective and/or irritating.

The advantage of the VoiceArrest™ system is that it adapts to characteristics that are specific to each work environment. Its unique calibration system (US Patent 7460675 B2) uses a microphone to measure the acoustic response and the background noise in the space. Based on this data, it automatically calculates the noise spectrum that must be used to emit a soft, uniform, and non-disruptive masking sound.

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