



Sound Masking Solutions for Call Centers

The Call Center Challenge: Maximize Worker Density While Maintaining Productivity And Privacy

Open floor plans are commonplace in call centers. These layouts allow facility managers to maximize their existing space while keeping construction costs to a minimum. Call center workstations are typically small, arranged in 4 ft. by 4 ft. (1.22 m x 1.22 m) sections with short partitions. This translates into a space with a lack of acoustic blocking and absorption, creating an environment full of distractions and privacy concerns.

In their presentation at a recent IC BEN conference, Drs. Valtteri Hongisto and Annu Haapakangas presented the results from their acoustic environment and work performance survey. The survey included 689 employees from 11 companies ranging from customer service call centers to general open offices. 48% of respondents reported speech as the most disturbing source of noise.¹ In addition, the survey found that employees on average wasted 21.5 minutes per day due to noise distractions.¹

Call centers in the healthcare, financial and legal industries have an additional obligation to maintain client confidentiality. In addition to noise canceling headsets and other acoustic treatments, call centers have a need for employing sound masking technology to meet their obligation of providing their clients privacy. Our QtPro™ system is a budget friendly option to increase the privacy level within your space.

Call Centers Using QtPro

Cambridge Sound Management has installed QtPro sound masking systems in hundreds of millions of square feet of space, including call centers for:

AT&T	Macy's	TD Bank
Bank of America	Manulife Financial	Toyota
Capital One	Mastercard	Walmart
Citibank	Nike	Wells Fargo
Costco	QVC	Hundreds more...
Harley Davidson	Reebok	
Home Depot	Scottrade	

What is sound masking and how does it work?

Adding sound to a space actually makes the space seem quieter. It sounds counter-intuitive but it's true. This is because the added sound reduces the intelligibility of human speech. When you can't understand what someone is saying, their words are less distracting — in fact, you probably don't even notice them.

Here's an example of sound masking in everyday life. Have you ever had a conversation with someone while you are washing dishes and they are on the other side of the kitchen? When the water isn't running, you can hear the other person's words perfectly. When you turn the water on it becomes much harder to hear them and understand what they are saying. The person isn't speaking more softly, but they sound as if they are. This is because the noise of the running water is "masking" the sound of the person speaking to you.

Sound masking mimics this phenomenon on a much more sophisticated and effective scale. By adding ambient sound to an environment (such as professionally engineered sounds that sound similar to water flowing or airflow) you help mask the other noises in the environment, making them less distracting.



QtPro™ Sound Masking: A Simple Solution To Increase Productivity And Privacy

The QtPro system is centered on the deployment of small direct field, omni-directional emitters that are installed directly into the user's environment, providing uniform coverage. Unlike in-plenum systems installed above the ceiling tile, QtPro systems offer the flexibility of providing sound masking only in the spaces in which it is needed, eliminating unwanted spill over into adjacent spaces.

Acoustic consultants use the Privacy Index (PI) to measure the effectiveness of various forms of sound dampening. The range for PI scores is 0% (No Privacy) to 100% (Confidential Privacy).

Drs. Hongisto and Haapakangas conducted a series of laboratory experiments focusing on the effect of speech intelligibility on task performance.² This two-year study measured participants short-term memory recall in a variety of speech privacy environments. The environments ranged from a sound masking fully deployed (PI: 90%). The researchers found a 8.7% increase in the participants' ability to recall a series of numbers and a 7.8% increase in recollection of words.² This study highlights the effectiveness of sound masking in decreasing distraction and improving worker performance.

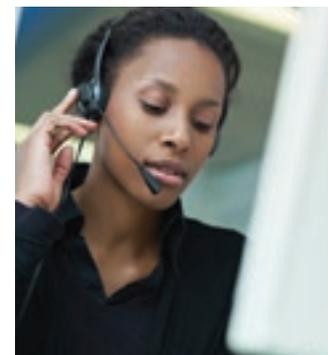


21.5

Minutes per day wasted on average by noise distractions

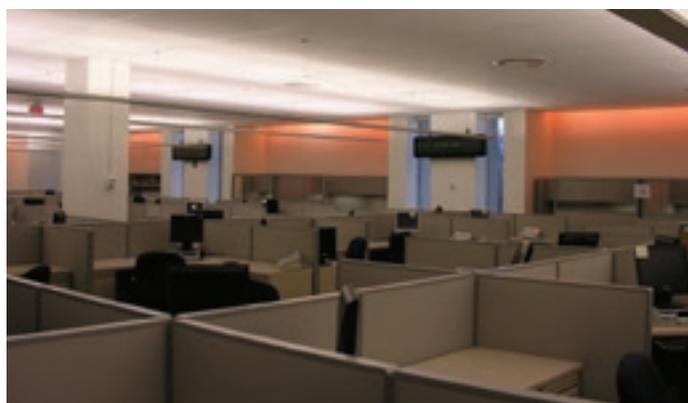
8.7

Percentage of increase in worker's ability to recall a sequence of numbers correctly after sound masking installed



// Bank of America's National Helpline site in Boston houses over 200 associates. Even with all that talking, our work environment is private and productive thanks to sound masking from Cambridge Sound Management. Their solution is straightforward and effective. I wouldn't open a call center without it. **//**

Edward (Ted) Klemm
Vice President, National Helpline
Bank of America



References:

1. "Perceived Acoustic Environment, Work Performance And Well-being - Survey Results From Finnish Offices," A. Haapakangas, R. Helenius, E. Keskinen, Valtteri Hongisto. Performance: 9th International Congress on Noise as a Public Health Problem (ICBEN) 2008 Foxwoods, CT
2. "Effect of Speech Intelligibility on Task Performance- An Experimental Laboratory Study," A. Haapakangas, M. Haka, E. Keskinen, V. Hongisto. Performance: 9th International Congress on Noise as a Public Health Problem (ICBEN) 2008 Foxwoods, CT

QtPro™ Line of Products

QtPro direct-field sound masking systems are ideal for call center environments. All QtPro systems are GreenSpec listed, consume less than 27 watts of power and can contribute to LEED Certification. These versatile systems are available with a variety of control module options suitable for small spaces to multi-site facilities.

Call Center Size	Product	Zones	Max Coverage	Paging and/or Music Inputs	System Control
Small	Qt® 100	1 Zone 1-120 Emitters	12,000 ft ² / 1,100 m ²	1 Input for Paging or Music	- LCD Front Panel Control
Medium	Qt® 300	3 Zones 1-360 Emitters	36,000 ft ² / 3,500 m ²	2 Inputs for Paging and/or Music	- Pre-installed software via LAN direct PC connect - LCD front panel control
Large	Qt® 600	6 Zones 1-720 Emitters	72,000 ft ² / 7,000 m ²	2 Inputs for Paging and/or Music	- Pre-installed software via LAN direct PC connect - LCD front panel control



About Cambridge Sound Management

Cambridge Sound Management, Inc., the global leader in sound masking, manufactures QtPro sound masking systems to help organizations across multiple industries protect speech privacy, reduce noise distractions, and fuel workplace productivity. Powered by direct-field Quiet Technology, QtPro works by emitting a uniform, barely perceptible background sound at the frequencies of human speech. Cost effective and easy to install, QtPro is deployed in hundreds of millions of square feet of space throughout the world including commercial organizations, healthcare facilities, financial services, government agencies, and educational institutions.



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