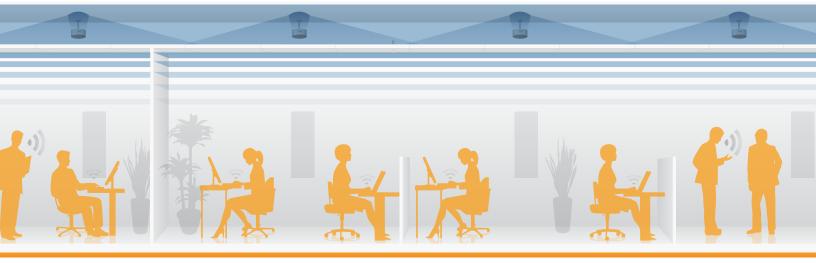
## OFFICE SOUND MASKING SYSTEM





## The Most Advanced Sound Masking System for Today's Ever–Evolving Workplace

Soft dB sound masking system is a proven, cost-effective solution for improving acoustic privacy and comfort in office environments. The automatic and precise tuning of the masking sound based on the unique conditions of each work area is what makes our system special. It's all about 3 key features:

#### Auto Equalization & Smart System Calibration

Our system's 340 narrow band automatic EQ takes into account the room's acoustic response to generate an ideal sound masking spectrum that blends perfectly with the existing soundscape. Self-Adjusting Volume Based on Room Noise Levels

Sound masking volume is never too loud nor too weak, always just right. It automatically goes up as the office gets busier, noisier and down to minimum recommended level as things become quieter.

#### Network-Ready Multizone Sound Masking & Paging

Wired or wireless, our system can simultaneously distribute sound masking, paging, and background music to multiple independently controlled zones, however big or small, across entire buildings.

### Soft dB Sound Masking System Components

Compact Controllers 2 to 8 independent zones



Rackmount Controllers 8 independent zones

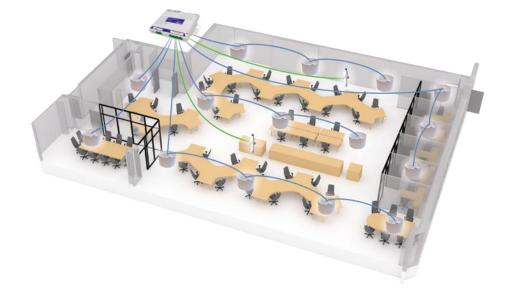


Sound Masking/Paging Loudspeakers







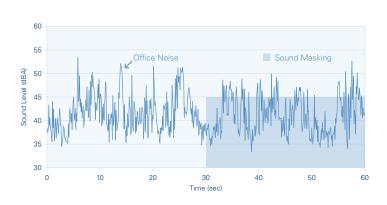


### System Features

- WIFI/LAN connectivity
- Paging/music channels
- Individual speaker control
- Volume scheduler
- Gradual volume ramp-up
- Built-In Self-Test (BIST)
- Calendar-based adjustments
- LEED & WELL standards

# How Does Sound Masking Work?

In office spaces, background noise levels are generally low. Workers can overhear many conversations which makes it difficult for them to stay focused. To address this problem, sound masking systems emit a soft, unnoticeable ambient sound through a network of loudspeakers. This specially-engineered sound evens out the office soundscape while muffling out surrounding distractions and private conversations.



#### Noise Level Variations in Typical Offices

#### Sound Masking Proven Benefits

### Higher Employee Productivity

Sound masking makes surrounding conversations and common noise distractions a lot less audible. The result: office workers achieve better concentration, faster flow state, and their productivity rises significantly.

### Superior Acoustic Privacy

It's easier and cheaper to use sound masking than conventional soundproofing methods to achieve proper acoustic privacy in office spaces. Soft dB sound masking is a scientifically-proven and simple solution for ensuring confidentiality where and when it matters most.

## User-Friendly Graphical Interface

# Full-Featured System Management Software

Making adjustments to all or specific masking/paging zones is very intuitive as system components are displayed on top of the workspace layout.

#### Centralized Touchscreen Volume Control Panel

Sound masking and background music volume levels can be adjusted for select office zones through a sleek, password protected touchscreen panel.

#### Slick Mobile Volume Control Application

Soft dB mobile app enables select office occupants to control the sound masking and background music volume via their Android or Apple smartphones.







# Automatic Equalization Process

#### The Perfect Sound Masking Spectrum Everywhere, Every Time

The real challenge in any office sound masking project? Generating a masking sound that's perfectly tailored for various types of spaces. Room size, ceiling type, wall materials, and furniture all have a direct influence on the sound masking diffusion. If the sound masking system is not carefully calibrated based on the room's unique design and acoustic parameters, it'll be ineffective at best, irritating at worst.

Soft dB sound masking system is unique in how it self-adapts to characteristics that are specific to each work environment. Its unique patented calibration process (US 7460675 B2) uses in-ceiling sensors to measure the room's acoustic response and background noise levels. Based on this data, it automatically figures out the ideal frequency spectrum to generate a soft, uniform, and non-disruptive masking sound.

#### Fast & Accurate System Calibration

Soft dB sound masking system calibration takes less than a minute per independent office zone, all thanks to our unique patented automatic equalization process.

The automatic sound masking spectrum equalization is not only done in 1/3 octave bands, but also in 340 narrow bands. Our process consistently delivers a remarkably smooth, comfortable, and effective masking sound.

The quality of calibration is measured in real time by the system's integrated frequency analyzer. At a glance, it shows whether or not the masking sound coming out of the loudspeakers matches the desired spectrum.





WE TAKE PRIDE IN EVERY SOUND MASKING SYSTEM INSTALLATION

## Automated Sound Masking Volume Adjustments Based on Room Noise Levels



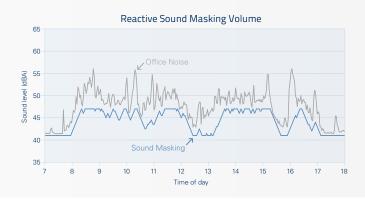
An office space is a dynamic environment where background noise and distraction levels vary a great deal depending on the work schedule and activities underway. To be optimal, sound masking must adapt to changes: It must increase as the office gets noisier and decrease back down to minimum ideal volume as things go quieter. Soft dB sound masking system is the only one that does that automatically.

#### Optimal Sound Masking & Acoustic Privacy at All Times

Our patented volume adjustment system (US 8116461 B2) detects variations in ambient noise levels in real time through acoustic sensors installed in the office ceiling. And thanks to the advanced signal-processing technology integrated in all our controllers, the sound masking volume self-adjusts based on how loud and quiet the office gets throughout the day.

#### Automated Volume Adjustments Ensure Superior Acoustic Comfort During Both Busy and Quiet Periods

The system's self-adjusting volume ensures good acoustic comfort, effective sound masking, and proper speech privacy throughout the day, however busy or quiet the workplace gets.



## How Does Automatic Volume Control Work?

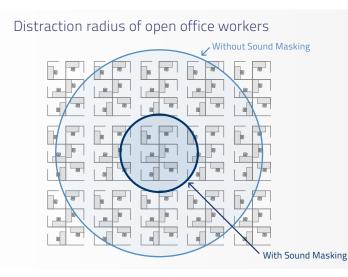
- Sound masking volume self-adjusts based on the office noise levels
- Office noise levels are measured by acoustic sensors installed in the ceiling
- Sound masking volume reactively increases and decreases in real time
- Volume adjustment rates and limits are individually programmable for each office zone
- Input mixer allows the combination of any active input with any output channel



## More Acoustic Privacy & Fewer Distractions

### Open-Plan Offices

Sound travels easily throughout open-plan offices since there are no walls and doors to block propagation. Most Private conversations can be overheard, disrupting focus for workers both nearby and further away. Sound masking improves the acoustic comfort and performance of open office workers by reducing their radius of distraction. Everyone gets a lot less distracted by conversations carried within a radius of 40 to 15 feet from where a sound masking loudspeaker is installed.



#### Private Offices & Meeting Rooms

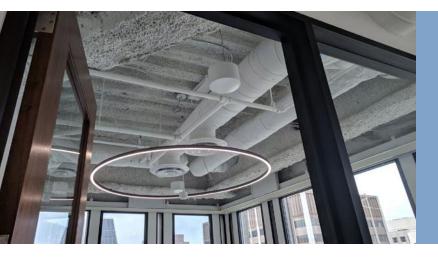
#### Lower construction & soundproofing costs

Soft dB sound masking system eliminates or significantly reduces the need for plenum barriers, specialty insulation, and extra drywall layers. Construction and soundproofing costs can be reduced by up to \$3 per square foot.



#### Greater workspace design & layout flexibility

Sound masking improves acoustic privacy between office areas that are only separated by demountable partitions. It boosts the effectiveness of movable walls and room dividers without compromising their flexibility and aesthetics.



#### Types of Work Environments That Benefit Most From Sound Masking

- Open-plan offices
- Private offices
- Meeting rooms
- Reception areas
- Financial institutions
- Healthcare facilities
- Call centers
- Law firms

## Thousands of Successful Sound Masking Projects & Satisfied Clients Worldwide



## FACILITIES PROFESSIONALS LOVE OUR SOUND MASKING SYSTEM

"Soft dB sound masking system is an absolute pleasure to work with. I have personally operated many sound masking systems in the past and never experienced something so user-friendly with almost unlimited system functionality."

Andrew Svedin Chief Engineer CBRE "Soft dB system and installation plan met our challenging space requirements. I'm very pleased with how our sound masking system is working, as it is making a positive impact on the quality of our work environment."

Karen Appelbaum Operations Director Northwest Area Foundation

#### CANADA

Air Canada Allstate Insurance Bombardier Recreational Products Bristol Myers Squibb Business Development Bank of Canada CAE Canada Revenue Agency Capital One Deloitte Department of National Defence Desjardins EXP First National Financial LP First West Credit Union Fujitsu Gowling WLG Health Canada Law Society of Alberta Manulife Financial Mastercard National Bank of Canada National Research Council of Canada Pfizer Canada SAP Software Solutions Sunlife Financial Ubisoft University of Toronto

#### UNITED STATES UK & EUROPE

- Aetna
- Akamai Technologies Alexion Pharmaceuticals Bank of America Blue Cross Blue Shield **Brown University** Cargill Cedars-Sinai Citizens Bank Ernst & Young **GE** Healthcare Google JPMorgan Chase & Co. Microsoft National Institute of Health New Balance Northside Hospital Oracle Partners HealthCare PepsiCo Salesforce Sony Interactive Entertainment U.S. Department of Energy U.S. Department of the Interior UCare Minnesota University of Massachusetts Well Fargo WeWork
- 1st Line Defence AXA Investment Managers **Buckingham Palace** Cisco Systems Digital River Discoverv Channel **Financial Times** IBM ING Group Luchtverkeersleiding Nederland Marks & Spencer Public Health England Rabobank **Rolls Royce** Swiss Re Group T-Mobile The Health Foundation University of Cambridge

#### ASIA

Daewoo Securities Himchan Hospital Kokuyo Group KT Corporation SoftBank Group Woori Bank

#### LATIN AMERICA

3M Company American Tower AT&T Bain & Company Compartamos Banco Gaz de France L'Oréal Mead Johnson Monex Group Nestlé Smith & Nephew

#### **AUSTRALIA**

Accenture ANZ Bank Australian National University BHP Billiton Commonwealth Bank International Towers Sydney Laing O'Rourke QBE Insurance Group Royal Automobile Association Standard & Poor's Suncorp Group WA Department of Treasury Westpac Bank

# Sound Masking Performance & Safety

#### Product Safety Standards



- ETL Listed IEC/EN/UL/CSA 62368-1 Hazard-Based Safety Standard for Audio, Video and Similar Electronic Apparatus-Safety Requirements
- ETL Listed UL 2043 Standard for Fire Test for Heat and Visible Smoke Release
- EN 55103-1, 2- FCC Electromagnetic compatibility for audio & video apparatus
  - CCEA Approved Sound masking speakers can be installed in compliance with all requirements of the City of Chicago Electrical Code for Plenum Installations
  - Compliant with all technical regulations of the Eurasian Customs Union (EACU)

## ASTM Performance Standards for Office Sound Masking Systems

Soft dB is an active member of the ASTM E33 Building and Environmental Acoustics and ASTM E33.02 Speech Privacy technical committees, helping develop science-driven standards for sound masking performance in today's workspace.



- ASTM E1374-06 (11) Standard Guide for Open Office Acoustics and Applicable ASTM Standards
- ASTM E1573-09 Standard Test Method for Evaluating Masking Sound in Open Offices
- ASTM E1130-08 Standard Test Method for Objective Measurement of Speech Privacy in Open Offices
  - ASTM E2638 Standard Test Method for Measurement of Speech Privacy Provided by Closed Rooms

#### LEED & WELL Acoustic Performance Standards



- Exceeds the LEED v4 and WELL v2 acoustic performance requirements for sound masking systems
- Uses high-efficiency amplifiers and electronic components to minimize energy consumption
- Includes an auto shutdown function for zero energy consumption outside of normal operating hours

#### **Environmental Regulation Compliance**



- RoHS compliance based on the European directive 2002/95/EC Restriction on Hazardous Material also know as Lead-free (no Lead (Pb), Cadmium (Cd), mercury (Hg), Hexa-Chromium(Hex-Cr))
- Soft dB adheres to the principle of the Directives on Waste Electrical and Electronic Equipment (WEEE) of the European Commission

#### **Crestron System Integration**

- CRESTRON. Soft dB sound masking system seamlessly integrates with Crestron building automation systems

Founded in 1996, Soft dB is a leader in sound masking technology, acoustical engineering, and noise control. With offices and trusted partners in more than 40 cities in over 25 countries, we have a truly global perspective.



#### Contact Us

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