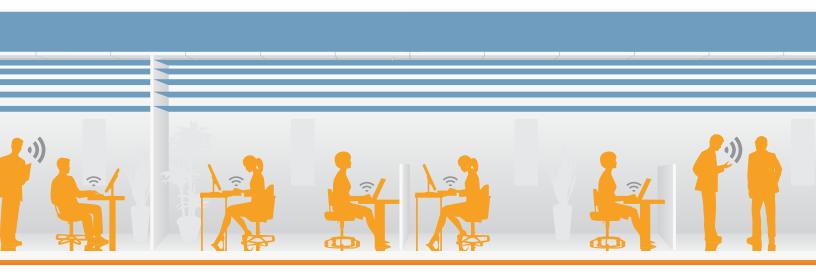


# **SmartSMS**NET

SOUND MASKING SYSTEM





Tel: 0845 643 2197 www.movingdesignslimited.co.uk

# State-of-the-art Sound Masking System

SmartSMS-NET is designed to provide the best masking sound while preserving the comfort of the occupants. The precise adjustment of the masking sound to the specific characteristics and noise conditions of each work area is what distinguishes this system. It is based on three unique features:

## Automatic Equalization Process

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

#### Real-Time Adaptive Adjustment of the Masking Sound Level

Continuously adjusts the masking sound level based on ambient noise measurement. In a busy work area, the masking sound increases. It decreases when the work area quiets down (Patent US 8116 461 B2).

#### Networked Sound Masking System

The SmartSMS-NET system combines both the flexibility of networked system and the cost efficiency of centralized systems. It can simultaneously handle small masking zones and larger masking zones across multiple floors.

#### SmartSMS-NET System Components

Plenum-Mount Controllers



Rack-Mount Controllers



Sound Masking Loudspeakers

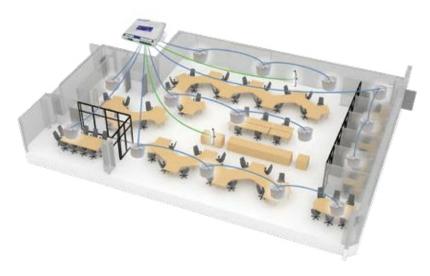


Active Volume Control Sensor





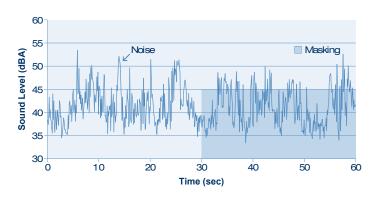
- Graphic control
- WIFI and LAN
- Paging and music
- Individual speaker control
- Gradual ramp-up
- Built-In Self-Test (BIST)
- Calendar adjustment
- LEED Design



# How Does Sound Masking Work?

In office spaces, the background noise level is generally low. Hence, people unintentionally overhear conversations – a difficult situation for all concerned. To address this problem, sound masking systems emit a soft, inconspicuous background sound with the use of loudspeakers. The ambient sound level becomes more uniform and noisy distractions, including speech, are muffled by the sound masking.

## Sound Level Variations in a Typical Office



#### Sound Masking Proven Benefits

#### **Productivity Gains**

Sound masking makes undesirable conversations and other noise distractions less audible. The result: employees are less distracted, they are able to concentrate better, and their productivity rises measurably!

#### **Greater Confidentiality**

It is easier and more economical to use sound masking than conventional soundproofing methods to obtain greater speech privacy in office spaces. The SmartSMS-NET has proven to be an effective, uncomplicated solution for increasing confidentiality in all types of work environments.

# Graphical User Interface

## Full-Featured Management Software

Project settings can easily be applied to specific masking zones as the office layout is visually integrated in the management software.



# Simple Touchscreen Control Panel

The SMS-CTP allows for simple, easy and secure masking volume adjustments via a sleek, centralized wall-mounted touchscreen panel.



## Personal Mobile Volume Control

User-friendly mobile app makes it easy to control masking, paging and background music volume from any Android or Apple smartphone.





# Unique Automatic Equalization Process

#### SmartSMS-NET Ensures Precise Adjustment of the Masking Spectrum

The challenge: to produce optimum masking sound 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.

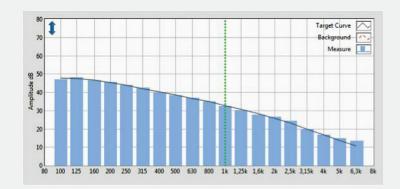
The advantage of SmartSMS-NET is that it adapts to characteristics that are specific to each work environment. Its unique calibration system (patent no.: US 7460675 B2) uses a sensor to measure the acoustic response and the background noise in the space. Based on this data, it automatically calculates the noise spectrum that must be used to emit a soft, uniform, and non-disruptive masking noise.

## Rapid Calibration, Accurate Results

With SmartSMS-NET, a masking zone can be completely calibrated in less than one minute, thanks to Soft dB automatic calibration process (pat. US 7460675 B2).

This automatic adjustment is done not only on  $\frac{1}{3}$  octave bands, but on 340 narrow band spectrum. It is quick, precise and provides an unparalleled regular smooth and comfortable sound masking spectrum.

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 desired sound spectrum.





GUARANTEED QUALITY OF INSTALLATION



# Real-Time Adaptive Adjustment of Masking Volume Based on Ambient Noise



SUPERIOR MASKING QUALITY AND ACOUSTIC COMFORT



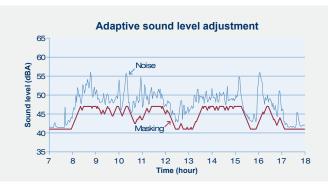
An office space is a dynamic environment in which ambient noise and the volume of sound distractions vary a great deal depending on the schedule and activities underway. To be optimal, sound masking must adapt to changes: It must increase during very active periods, and become more discreet when the area is quieter. Only SmartSMS makes this possible!

#### Effective Masking at All Times

Our adaptive adjustment system (US 8116461 B2) identifies variations in ambient noise in real time, from signals supplied by sound level sensors installed in the ceiling of the work space. And, thanks to an advanced signal-processing technology, it automatically adjusts the masking volume depending on the intensity of conversational noise and other noise distractions.

#### Smart Volume Adjustment to Maximize Acoustic Comfort

The active volume control system ensures unparalleled acoustic comfort and effective sound masking throughout the day, however busy or quiet the workplace gets.



## Real-Time Adaptive Adjustment Features

- Control of masking volume based on the level of disturbing noise in a room.
- Disturbing noise is measured using sound level sensors installed in the ceiling.
- Masking sound level is adjusted automatically in real-time.
- Adjustment rate, high limit and low limit are programmable separately, for each zone.
- An input mixer allows for the combination of any active input with any output channel.



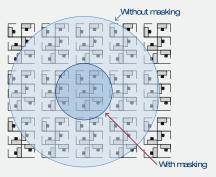


# Greater Confidentiality in All Environments

## Open-Plan Offices

Sound is easily transmitted throughout open-plan offices, given that there are no doors or walls to block propagation. Conversations are clearly perceived, which disturbs colleagues both nearby and further away. Sound masking raises the acoustic comfort level of open-plan offices by reducing the distraction radius. Hence, people are significantly less distracted by conversations that take place within a radius of 40 to 15 feet from where the sound masking loudspeaker is located.

#### Conversation radius of distraction





#### Closed Offices

#### Significant layout cost reduction

SmartSMS-NET sound masking system eliminates or reduces the need for plenum barriers, insulation and extra drywall layers. With our system, installation costs can be reduced by \$3 per square foot.

#### Greater flexibility

Sound masking improves speech privacy between offices separated only by partitions. It increases the acoustic performance of movable walls without compromising their practicality and flexibility.



# Types of Work Environments That Benefit from Sound Masking

- Open-plan offices
- Closed offices
- Meeting rooms
- Reception areas
- Financial institutions
- Health facilities
- Call centers
- And more



## Satisfied Clients



#### OUR EXPERTISE IS RECOGNIZED WORLDWIDE

"The work environment is very silent; quieter. At the end of the day, the employees are less tired. They don't feel the time going by because they are less disturbed and more concentrated."

Annette Filteau Director - Billing and Enrolment SSQ Financial Group

"The SoftdB product and installation plan met our challenging space requirements. I am very pleased with how the 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

Bombardier Bristol Myers Squibb Development Bank of Canada-BDC

Deloitte

Desjardins Credit Union Desjardins Insurance

Gaz Métro GlaxoSmithKline

Gouvernement du Québec Government of Canada

Hydro Québec Manulife

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Power Corporation PSP Investments

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Sandoz

SSO Insurance Group

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#### UNITED STATES

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Avery-Dennison

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SoftBrands St-Francis Alliance Health care

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U-Care Minnesota Universal Hospital Services

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#### EUROPE

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Direct Teleservice Docs International

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Pinewood Rabobank Robeco

RPC Reynolds Porter Chamberlain

The Prudential T-Mobile

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Daewoo Securities, Korea Himchan Hospital Korea Telecom Facilities Wooki Bank

#### MEXICO

MasterCard Microsoft

Gaz de France

Monex Mead Johnson

Bain

American Tower

Banco Compartamos

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Suncorp BHP

Fairfax Media

ANZ Bank

RAA QBE

Bain & Co

McInnes Wilson Lawyers

WA Treasury Department SLR Consulting

Standard & Poors

SmartSMSNFT

# SmartSMS-NET Sound Masking System

#### Safety Certifications









- 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 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)

#### Conformity to all ASTM requirements related to sound masking systems



FC CE

- 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 Office
- 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 Provide by Closed Rooms

Soft dB is an active member of the ASTM E33 Building and Environmental Acoustics and ASTM E33.02 Speech Privacy technical committees, helping develop international standards for sound masking performance.

#### LEED design





- Exceeds the requirements of LEED-V4 Acoustic Performance related to sound masking systems
- Uses of high-efficiency amplifiers and electronic components to minimize energy consumption
- Shut-down function for zero energy consumption outside of normal operating hours

#### Environmental sustainability





- SmartSMS-NET compliant to the European directive 2002/95/EC Restriction on Hazardus 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.

## Compatible with Crestron systems



• SmartSMS-Net can be linked to a Crestron Building management system

Founded in 1996, Soft dB is a leader in acoustics; its expertise is recognized worldwide. With corporate offices and distributors in more than 40 cities in over 25 countries, Soft dB has a truly global perspective.



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