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 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 (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 System**
  The SmartSMS-NET is very flexible, it features small masking zones and larger masking zones. It combines the flexibility of network system and the cost efficiency of centralized systems.

**SmartSMS-NET components**

- SMS-NET
- Speaker
- Adaptive Sensor
- SMS-NET Rack-Mount

**Additional Advanced Features**

- Graphic control interface
- Gradual ramp-up
- Handheld control
- Monitoring system
- Paging and music
- Calendar adjustment
- Individual speaker control
- 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 a loudspeaker system. The ambient sound level becomes more uniform and otherwise noisy distractions are muffled by the sound masking.

<table>
<thead>
<tr>
<th>Sound level variations in a typical office</th>
<th>Sound masking benefits</th>
</tr>
</thead>
</table>

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

Today, it is easier and more economical to use sound masking than conventional soundproofing methods in order 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, and ensuring better protection of your private information.

SMS-Net Graphic Control Interface

Changes can me made very easily, the layout is integrated in the software.
Unique Automatic Equalization Process

SmartSMS-NET Ensures Precise Adjustment of the Masking Spectrum

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 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 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 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 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 sound spectrum sought.
Real-Time Adaptive Adjustment of Masking Volume According to 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. In order 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 procedure, it automatically adjusts the masking volume depending on the intensity of conversational noise and other noise distractions.

Maintenance of Acoustic Comfort with Gradual Adjustment

We know that to be acceptable in a work environment, sound masking must be as undetectable as possible, where noise varies gradually. Noise variations gradually. Modifications to sound masking volume are, quite simply, imperceptible.

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

I 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 15 to 40 feet from where the sound-masking loudspeaker is located.

I Closed Offices

Significant layout cost reduction

SmartSMS-NET 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

SmartSMS-NET improves speech privacy between offices separated only by partitions. It increases the acoustic effectiveness of movable wall construction without losing its practical aspect.

Types of Work Environments That Profit from Masking

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

Founded in 1996, Soft dB is a leader in acoustics; its expertise is recognized worldwide. Soft dB offers consulting services for optimizing the acoustics of commercial and industrial facilities. It develops and commercializes sound masking systems, DSP cards, specialized acoustic measurement instruments, active noise control systems and acoustic modeling software.
Satisfied Clients

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

Annette Filteau
Director - Billing and Enrolment
SSQ Financial Group

“Sound masking was installed following the redevelopment of our office spaces. We had opted for moveable walls, and we wanted to improve the sound quality between the spaces. We immediately noticed a more mellow effect across the open areas and good privacy in our closed offices, this was despite all the conversations and the level of activity that takes place there. We were pleasantly surprised!”

Nicole Goulet
PSP Investments
Senior Manager, Facilities & Administrative Services

OUR EXPERTISE IS RECOGNIZED WORLDWIDE

CANADA
Bombardier
Bristol Myers Squibb
Business Development Bank of Canada
Deloitte
Desjardins Credit Union
Desjardins Insurance
Gaz Métro
GlaxoSmithKline
Government of Canada
Hydro Québec
Industrial Alliance
Manulife
Microsoft
Morneau Shepell
National Bank of Canada
PepsiCo Canada
Petro-Canada
Pfizer
PSP Investments
Rio Tinto
Royal Bank of Canada
Sandoz
SSQ Insurance Group
Sunlife

UNITED STATES
Aldi
Avery-Dennison
Cubist
Dassault
Emerson
Enerpac
Epsilon
Honeywell
Iron Mountain
Hanover Insurance
Nokia
Sears Roebuck
SoftBrands
Southern Graphic Systems
St-Francis Alliance Health Care
St. Joseph’s Hospital
Trane
Transoma
U-Care Minnesota
Universal Hospital Services
Varde
Verizon Wireless
Vitamix
Wells Fargo
West Bank

EUROPE
Accenture
Aegan
Cisco Systems
Delta Lloyd
Direct Teleservice
Docs International
Global Asset Management
IBM
Marketel
Marks & Spencer
Mastercard
Pinewood
Rabobank
Robeco
RPC Reynolds Porter Chamberlain
The Prudential
T-Mobile
University of Cambridge

MEXICO
MasterCard
Microsoft
Gaz de France
Monex
Mead Johnson
Bain
American Tower
Banco Compartamos
Nestle
Smith & Nephew
L’Oreal

AUSTRALIA
Ernst & Young
Suncorp
BHP
Fairfax Media
ANZ Bank
RAA
QBE
Bain & Co
McInnes Wilson Lawyers
WA Treasury Department
SLR Consulting
Standard & Poors

ASIA
Daewoo Securities, Korea
Himchan Hospital
Kokuyo, Japan
Korea Telecom Facilities
Wooki Bank

www.softdb.com
The Smart SMS-NET

1st Wifi networked sound masking system: a breakthrough for customers and installers

- Wireless network simplifies design and reduces installation costs (no proprietary cables)
- Adaptive volume control, a Soft dB exclusive feature that provides unparalleled comfort
- State of the art graphical user interface

Safety Certifications

- ETL Listed UL 60065 / ULC 60065 Listed : Audio, Video and Similar Electronic Apparatus-Safety Requirements
- ETL Listed UL 2043 Standard for Fire Test for Heat and Visible Smoke Release for Discrete Products and Their Accessories Installed in Air-Handling Spaces
- EN 55103-1, 2- FCC Electromagnetic compatibility for audio & video apparatus

Conformity to all ASTM requirements related to sound masking systems

- ASTM E1374-06 (11) - Standard Guide for Open Office Acoustics and Applicable ASTM Standards
- ASTM E1130-08 – Standard Test Method for Objective Measurement of Speech Privacy in Open Offices Using Articulation Index
- ASTM E2638 – Standard Test Method for Objective Measurement of Speech Privacy Provide by Closed Rooms

LEED design

- Exceeds the requirements of LEED-V4 Acoustic Performance related to sound masking systems
- Uses of high-efficiency amplifiers and low consumption electronic components allowing a very low energy consumption
- Integrates a shut-down function that reduces the energy consumption to zero outside of normal operating hours