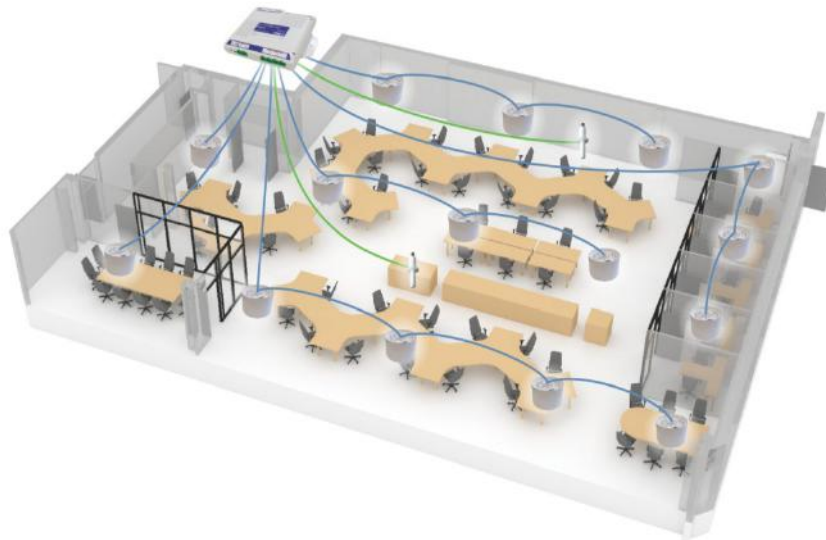# smartSMS-NET

Networked Smart Sound Masking System

Flexibility, simplicity and unrivaled sound masking quality

The **smartSMS-NET** sound masking system allows to implement advanced sound masking systems thanks to its network structure and broad range of controllers. The system flexibility makes it cost-efficient for small simple systems as well as large and advanced sound masking systems.

Each smart**SMS-NET** controller provides:

- Up to 8 output channels per controller
- Up to 12 speakers per output channel
- Independent equalizer for each output channel
  - 340 narrow bands automatic equalizer
  - 1/3rd octave bands automatic or manual equalizer
- High-power amplifier providing 92 dBA at 1m
- Up to 8 inputs for active volume control sensors
- Up to 4 music and paging inputs with independent 1/3rd octave equalizers for each output channel
- 2 inputs for wall mounted volume control knobs

The **smartSMS-NET** sound masking system includes Soft dB's exclusive features that improves the quality of sound masking technology and is the reference in the industry:

- Adaptive volume adjustment for optimal efficiency and comfort (US Patent 8116 461)
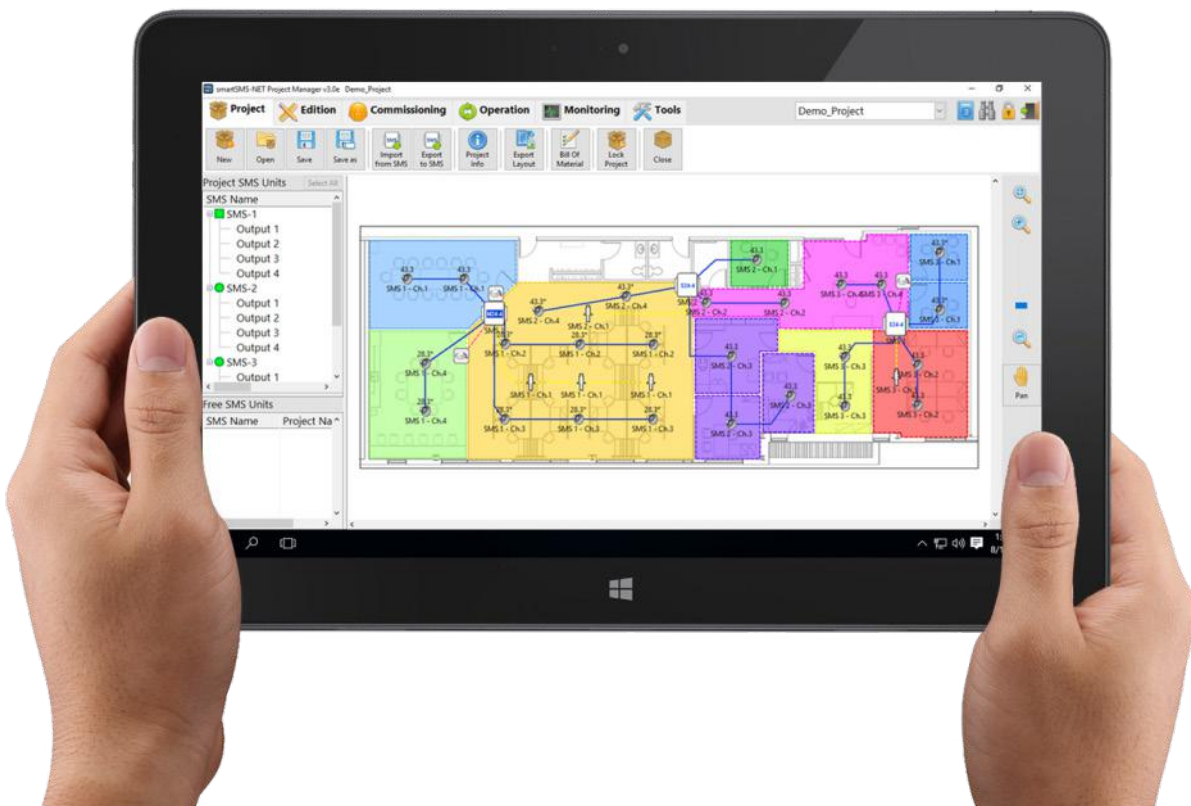- Automatic equalization that guarantees the optimum sound masking spectra (US Patent 7460675)

Soft **dB**

| 1040, Belvedere Avenue, Suite 215, | **Phone** 1 (418) 686-0993 | **Web Site** www.softdb.com |
| Quebec (Qc) G1S 3G3 Canada | **Toll Free** 1 (866) 686-0993 | **E-mail** info@softdb.com |

Project Manager Software

The smartSMS-NET Project Manager Software allows the user to easily **see**, **access**, and **control** each loudspeaker or group of loudspeakers with a state of the art graphical user interface.

Designed with touch screen features in mind, the smartSMS-NET Project Manager Software integrates the **design**, **calibration** and **operation** stages:

- Place controllers, speakers, zones and wiring schematic directly on the office layout;
- Calibrate and setup the system;
- Convert the Project manager software to a simple and intuitive end-user control panel.

The smart**SMS-NET Wifi networked system: A breakthrough in sound masking technology**

Simple and highly versatile, without compromise on sound masking performance and quality.

- Wireless network simplifies design and reduces installation costs (no proprietary cables required)
- Adaptive volume control, a Soft dB exclusive feature that provides unparalleled comfort and efficiency of the sound masking system
- State of the art graphical user interface that integrates the design, setup, and calibration stages directly on the office layout plan.
- 24/7 monitoring and diagnosis feature (optional)

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System Specifications

Sound Masking

Output channels	Up to 8 per controller (See controller model specifications below)
Sound Masking Equalizer	23 1/3rd Octaves bands from 63Hz to 10kHz
Sound Masking Ref Spectrum	13 pre-set reference masking spectrums; unlimited user defined masking spectrums from 100 to 6,3kHz
Sound Masking Volume	30 to 92 dBA in 0.1 dB steps and mute
Sound Masking Volume Ramp-Up	User defined, up to 30 days

Active Volume Control

Nb Sensor Inputs	Up to 8 per controller (See Controller Model Specifications Below)
Max Nb Sensors/Input	6
Control	Independent sound masking volume adjustment for each output channel
Masking Volume Change Rate	Adjustable down to 0.1dB steps, updates every 15s
Active Adjustment Range	User defined; maximum range: -7 to +3 dB relative to reference masking level.

Music and Paging

Music and Paging Inputs	Up to 4 per controller (See Controller Model Specifications Below)
Music and Paging Mixer	Independent for each output channel
Music and Paging Volume	30 to 92 dBA in 0.1dB steps and mute
Music and Paging Equalizer	20 1/3rd octave bands

Volume Control Knobs

Volume Ctrl Knob Inputs	2 per controller
Volume Ctrl Knob Mixer	Independent for each output channel (Sound Masking and/or Paging and Music)
Volume Range	User defined

Schedule

Schedule	24 hour periods per day, 7 days
Volume	0.1dB steps
Transition Ramp	Instant, 2m30, 5min, 10min, or 15min
Schedule Mixer	Independent for each output channel (Sound Masking and/or Paging and Music)
Daylight Saving Time	Automatic Adjustment depending on local time zone settings
Time source	On-Board Real-Time Clock

Monitoring

24/7 system diagnosis (requires computer running Project Manager Software)

LEED

Design Feature	Controller can be put in low-power mode according to daily schedule
Schedule	7 daily periods per week (user defined)

System Specifications (cont.)

Connectivity	
Connectivity	Ethernet, USB or WiFi
WiFi	WPA/WPA2 Personal or WEP, (WiFi module can be disabled if not required)

Project Manager Software	
Software Requirements	Windows 7 and later, 1.2 GHz CPU, 2 GB RAM

Warranty	
Warranty	5 years

Certifications – ETL Listed 3191772

UL 62368-1:2014 / CSA C22.2#62368-1:2014 - Audio/Video, Information And Communication Technology Equipment - Part 1: Safety

UL 2043 – Standard for Fire Test for Heat and Visible Smoke Release for Discrete Products and Their Accessories Installed in Air-Handling Spaces

FCC / EN 55103-1&2 – Electromagnetic compatibility-Product family standard for audio, video, audio-visual and entertainment lighting control apparatus for professional use - Part 1: Emissions, Part 2: Immunity

Related ASTM Standards

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 Using A-Weighted and One-Third Octave Band Sound Pressure Levels

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

Controllers Specifications

Controller Model	ML12-2ch	ML24-4ch	SL24-4ch	ML48-8ch	SL48-8ch	SL24-8ch	RL96-8ch	RLCTL2-8ch
Picture								
Output Channels	2	4	4	8	8	8	8	8
Max Speakers/Channel	6	6	6	6	6	3	12	75^2
Max Spkrs./Controller	12	24	24	48	48	24	96	600
Active Vol. Ctrl. Inputs[1]	2	4 (4 shared)	4 (4 shared)	8 (4 shared)	8 (4 shared)	8 (4 shared)	8 (4 shared)	8 (4 shared)
Music/Paging Inputs[1]	2	4 (4 shared)	4 (4 shared)	4 (4 shared)	4 (4 shared)	4 (4 shared)	4 (4 shared)	4 (4 shared)
Vol. Ctrl Knob Inputs	2	2	2	2	2	2	2	2
Form Factor	Mini-Plenum	Mini-Plenum	Mini-Plenum	Mini-Plenum	Mini-Plenum	Mini-Plenum	Rack-Mount	Rack-Mount
Power	24V / 15W	24V / 25W	24V / 25W	24V / 50W	24V / 50W	24V / 25W	24V / 150W	24V / 15W
Can be a Project Master?	YES	YES	NO	YES	NO	NO	YES	YES

1: A shared input can be an active volume control sensor input OR a paging/music input.

2: The RLCTL-8ch does not include power amplifiers. An external audio amplifier must be used in conjunction with the RLCTL-8ch to drive loudspeakers. A maximum of 75 loudspeakers is recommended to avoid large uneven zones.

3: Wifi Security : WPA/WPA2 Personal or WEP. Wifi module can be disabled if not required.

Loudspeakers Specifications

Speaker Models	SMS-STR	SMS-FLAT	SMS-SURF4	SMS-VIBX	SMS-DIRECT	SMS-HDN
Picture						
Power	10W	10 W	10W	5W	10W	5W
Line Voltage	25 V	25 V	25 V	Note 1	25V	25 V
Sensitivity	92 dB	85 dB	87 dB	Note 2	91 dB	Note 2
Enclosure Material	Painted steel	Painted Steel	Fireproof ABS and Steel	Fireproof ABS	Fireproof ABS	Fireproof Lexan
Frequency Response	100 Hz to 10 kHz	100 Hz to 10 kHz	100 Hz to 10 kHz	100 Hz to 10 kHz	100 Hz to 10 kHz	100 Hz to 10 kHz
Connectors[4]	Wire lead	Push-button	Spring Loaded	Screw Terminals	Screw Terminals	Screw-On
Driver	13 cm (5") full range	2.5 x 10 cm (1" x 4") full range	9.5 cm (4") full range	Vibration Exciter	12.5 cm (5") full range	Vibration Exciter
Color	White or Black	White or Black	White	White	White or Black	White
Mounting	Suspended	Bracket with screw holes	Rotating cams	Self-Adhesive[3]	Bracket with screw holes	Self-Adhesive[5]
Weight	1.9 kg (4.2 lbs)	1.13 kg (2.5 lbs)	1.2 kg (2.6 lbs)	0.14 kg (0.3 lbs)	1.6 kg (3.5 lbs)	0.47 kg (1.0 lbs)
Shipping Weight	2.3 kg (5.1 lbs)	1.21 kg (2.7 lbs)	1.6 kg (3.5 lbs)	0.25 kg (0.6 lbs)	1.8 kg (4 lbs)	0.55 kg (1.2 lbs)
Box Dimensions	26 x 26 x 15cm (10¼ x 10¼ x 6")	23 x 29.5 x 9.5 cm (7¾ x 3¾ x 9")	17 x 17 x 18 cm (6¾ x 6¾ x 7")	14.5 x 14.5 x 3.5 cm (5½ x 5½ x 1¼")	18 x 18 x 29 cm (7 x 7 x 11½")	21.5 x 17 x 8 cm (7 x 6½ x 3¼")

1: 16 Ohm impedance. Maximum of 4 SMS-VIBX per output channel

2: Sensitivity dependant of surface to which it is mounted

3: Self-adhesive on a clean surface such as painted gypsum. Use construction adhesive on a rougher surface.

4: Recommended wiring is 18AWG / 2 conductor plenum rated cable

5: Construction adhesive; 3M spray can also be used on clean surface.

Active Volume Control Sensor Specifications

Active Volume Control Sensor	
Picture	
Sensitivity	70 mV/Pa
Directivity	Omnidirectional
Frequency range	20Hz - 20kHz
Mounting	3/8" Hole in ceiling tile
Color	White
Connector	BNC
Recommended Wiring	RG-59

Volume Control Knob Specifications

Volume Control Knob	SMS-ZN-VC	SMS-SK-VC
Picture		
Adressing Type	Zone	Speaker
Wall Plate	Decora, 1-gang	
Colors	White, Black, or Almond	
Connector	Screw-on	
Recommended Wiring	22AWG-2 Shielded	

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