

smartSMS-NET

Networked Sound Masking System

ML12-2ch Controller

Each ML12-2ch controller unit provides:

- 2 output channels
- Up to 6 speakers per channel
- Independent equalizer for each channel
 - 340 narrow bands automatic equalizer
 - 1/3rd octave bands automatic or manual equalizer
- High-power amplifier providing 88 dBA at 1m
- 2 inputs for active volume control sensors
- 2 music and paging inputs with independent 1/3rd octave equalizers for each output channel
- 2 inputs for wall mounted volume control knobs



smartSMS-NET networked sound masking system highlights:

- Simple and highly versatile without compromising sound masking performance and quality.
- Many controller units can be networked together to construct large sound masking projects.
- Adaptive volume adjustment for optimal efficiency and comfort (US Patent 8116 461)
- Automatic equalization that guarantees the optimum sound masking spectra (US Patent 7460675)

Specifications

Outputs	
Nb Outputs	2
Max Nb Speakers/Output	6
Max Nb Speakers/Controller	12
Sound Masking	
Sound Masking Volume	30 to 88 dBA in 0.1 dB steps and mute
Sound Masking Equalizer	23 1/3 rd 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 Ramp-Up	User defined, up to 30 days
Active Volume Control	
Nb Sensor Inputs	2
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.

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Specifications (cont.)

Music and Paging	
Music and Paging Inputs	2
Music and Paging Mixer	Independent for each output channel
Music and Paging Volume	30 to 88 dBA in 0.1dB steps and mute
Music and Paging Equalizer	20 1/3rd octave bands
Volume Control Knobs	
Volume Ctrl Knob Inputs	2
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
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)
Project Master	
Can Be a Project Master	YES
Connectivity	
Connectivity	Ethernet, Wifi, or USB (not required for normal operation)
Wifi	WPA/WPA2 Personal or WEP - <u>Wifi radio module can be disabled if not required</u>
Power	
Input	18-24VDC, Max 15W (24V-50 W power-supply)
Physical	
Size	191mm x 135mm x 28mm (7.5" x 5.3" x 1.1")
Weight	300g (0.7lb)
Warranty	
Warranty	5 years
Certifications – ETL Listed 3191772	
UL 60065 / ULC 60065 – Standard for Audio, Video and Similar Electronic Apparatus – Safety Requirements	
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	