

# smartSMS-NET

## Networked Sound Masking System

### ML24-4ch and SL24-4ch Controller

Each ML24-4ch and SL24-4ch controller units provide:

- 4 output channels
- Up to 6 speakers per channel
- Independent equalizer for each channel
  - 340 narrow bands automatic equalizer
  - 1/3<sup>rd</sup> octave bands automatic or manual equalizer
- High-power amplifier providing 88 dBA at 1m
- 4 inputs for active volume control sensors
- 4 music and paging inputs with independent 1/3<sup>rd</sup> 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	4
Max Nb Speakers/Output	6
Max Nb Speakers/Controller	24
Sound Masking	
Sound Masking Volume	30 to 88 dBA in 0.1 dB steps and mute
Sound Masking Equalizer	23 1/3 <sup>rd</sup> 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	4
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.)

<b>Music and Paging</b>	
Music and Paging Inputs	4
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
<b>Volume Control Knobs</b>	
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
<b>Schedule</b>	
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
<b>Monitoring</b>	
24/7 system diagnosis (requires computer running Project Manager Software)	
<b>LEED</b>	
Design Feature	Controller can be put in low-power mode according to daily schedule
Schedule	7 daily periods per week (user defined)
<b>Project Master</b>	
Can Be a Project Master	YES for ML24-4ch, NO for SL-24-4ch
<b>Connectivity</b>	
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>
<b>Power</b>	
Input	18-24VDC, Max 25W (24V-50 W power-supply)
<b>Physical</b>	
Size	191mm x 135mm x 28mm (7.5" x 5.3" x 1.1")
Weight	300g (0.7lb)
<b>Warranty</b>	
Warranty	5 years
<b>Certifications – ETL Listed 3191772</b>	
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	
<b>Related ASTM Standards</b>	
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	