

RL96-8 / RLCTL2-8 Controllers

smartSMS-NET Sound Masking System



V20190805



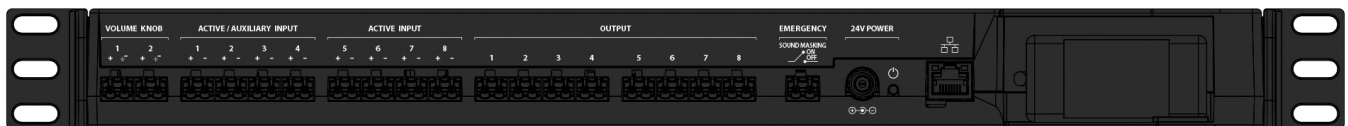
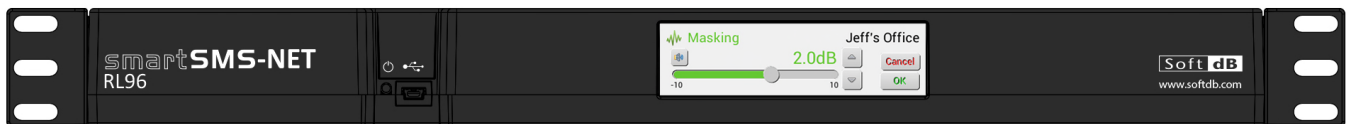
RL96-8ch

Compact 1U Rackmount 8-Channel Sound Masking Controller

Specially tailored to office spaces above 5000 square feet, the RL96-8ch delivers a whole new level of sound masking performance in a sleek 1U compact footprint.

Key Features:

- 8 output channels
- Up to 12 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 92 dBA at 1m
- 8 inputs for active volume control sensors
- 4 music and paging inputs with independent 1/3rd octave equalizers for each output channel
- 2 inputs for wall mounted volume control knobs
- Touch-screen interface for zone volume control.



Soft dB 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	8
Max Nb Speakers/Output	12
Max Nb Speakers/Controller	96
Sound Masking	
Sound Masking Volume	30 to 92 dBA in 0.1 dB steps and mute
Sound Masking Equalizer	23 1/3rd Octaves bands from 63Hz to 10kHz
Sound Masking Ref Spectrum	13 preset reference masking spectrums; Unlimited user defined spectrums from 100 to 6,3kHz
Sound Masking Volume Ramp-Up	User defined, up to 30 days
Active Volume Control	
Nb Sensor Inputs	8
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	4
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
Volume Ctrl Knob Mixer	Independent for each output channel (Sound Masking and/or Paging and Music)
Volume Range	User defined
Emergency Mute Relay	
Function	Mute Sound Masking and Music during an Emergency event
Touch Screen Interface	
Features	Adjust Sound Masking Volume and Equalizer and Music Volume for every Zone
Volume Range	20 dB, at 0.5dB step and mute
Security	User defined passcode
Schedule	
Schedule	24 hour periods per day, 7 days
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

Specifications Cont'd

System Monitoring	
24/7 system diagnosis	Yes - Requires computer running Project Manager Software
LEED Requirements	
Acoustics	Enhanced acoustical comfort and improved speech privacy
Power Consumption	Controller can be put in low-power mode according to user-defined daily schedule
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 150W
Physical	
Size	430mm x 190mm x 44mm (16.9" x 7.5" x 1.75") (Supplied with 1U rack-mount wings)
Weight	1.7kg (3.8lb)
Warranty	
Warranty	5 years

Certifications

UL62368-1 – Standard for Audio, Video and Similar Electronic Apparatus – Safety Requirements

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 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

ML-SL Series Controllers

smartSMS-NET Sound Masking System



V20190805



ML Series Controller

smartSMS-NET Sound Masking System

Each **ML-SL** controller provides:

- A compact Form-Factor
- Up to 8 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 up to 92 dBA at 1m
- Up to 8 inputs for active volume control sensors
- Up to 4 music/paging inputs with independent 1/3rd octave equalizers for each output channel
- 2 inputs for wall mounted volume control knobs



smartSMS-NET sound masking system highlights:

- Many controllers can be networked together to construct large sound masking installations.
- 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

	ML48-8ch	ML24-4ch	ML12-2ch
Outputs			
Nb. Outputs	8	4	2
Max Speakers/Output	6		
Max Speakers/Controller	48	24	12
Sound Masking			
Volume	30 to 92 dBA in 0.1 dB steps and mute		
Equalizer	23 1/3 octave bands (63 Hz to 10 kHz) or 500 narrow bands automatic equalizer		
Reference Spectrum	13 pre-set sound-masking reference spectrums, unlimited user defined spectrums		
Volume Ramp-Up	User defined, up to 30 days		
Active Volume Control			
Nb. Inputs ¹	8 (4 shared)	4 (4 shared)	2
Max Sensors/Input	6		
Control	Independent sound masking volume adjustment for each output channel		
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.		

Specifications (Cont.)

Music and Paging	ML48-8ch	ML24-4ch	ML12-2ch
Nb. Inputs ¹	4 (4 shared)	4 (4 shared)	2
Mixer	Independent for each output channel		
Volume	30 to 92 dBA in 0.1dB steps and mute		
Equalizer	20 1/3rd octave bands		
Volume Control Knobs			
Nb. Inputs	2		
Mixer	Independent for each output channel (Sound Masking and/or Paging and Music)		
Volume Range	User defined		
Volume 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			
Diagnosis	Automatic		
Reporting	System diagnosis report sent by email and/or stored locally		
Requirement	Computer running Project Manager Software		
LEED			
Feature	Controller can be put in low-power mode according to daily schedule		
Schedule	7 daily periods per week (user defined)		
Connectivity			
USB	USB 2.0, Mini B connector		
Wifi ²	802.11b/g/n, WEP 40/64-bits or WPA/WPA2 personal, 450 kbps		
Ethernet	DHCP or Static IP, 350 kbps		
Power			
Input	24 VDC		
Rating	50W	25W	15W
Power-Supply	EA-1050		
Physical			
Dimensions	245mm x 135mm x 28mm (10" x 5.3" x 1.1")	191mm x 135mm x 28mm (7.5" x 5.3" x 1.1")	
Weight	400g (0.9lb)	300g (0.7lb)	
Certifications			
Compliance	ETL Listed 3191772		
Safety	UL 62368 / ULC 62368		
Fire Test	UL 2043		
Electromagnetic	FCC – EN 55103-1&2		

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

2: Wifi module can be disabled if it's not required