

# VAR-96-8CH CONTROLLER UNIT

## VAR-96-8CH Highlights:

- Real-Time Adaptive Technology. Continuously and seamlessly adjusts the volume of the masking sound for optimal confidentiality and comfort (US Patent 8116461 B2)
- Automatic equalization that guarantees the optimum sound masking spectra (US Patent 7460675 B2)
- Simple and highly versatile without compromising sound masking performance and quality.
- Many controller units can be networked together to construct large sound masking projects.

### VAR-96-8CH Controller Product Specifications:

- 8 output channels
- Up to 12 speakers per channel
- Independent equalizer for each channel
  - 340 narrow bands automatic equalizer
  - 1/3 octave bands automatic or manual equalizer
- 8 inputs for Active Volume Control of the masking sound in each zone
- Independent 1/3 octave equalizers on inputs when used for music/paging
- High-efficiency / low consumption power amplifier providing 88 dBA at 1m
- Integrated Touch Screen for easy control of masking sound and music in each zone
- Compact rackmount unit (1U) with incredible performances while meeting LEED requirements

## TECHNICAL SPECIFICATIONS

### Outputs

Nb Outputs 8

Max Nb Speakers/Outputs 12

Max Nb Speakers/Controller 96

### Sound Masking

Sound Masking Volume 30 to 88 dBA in 0.1 dB steps and mute

Sound Masking Equalizer 23 1/3 octaves bands from 63Hz to 10kHz

Sound Masking Ref Spectrum 12 pre-set reference masking spectrums; unlimited user defined masking spectrums from 100 to 6.3kHz



<b>Adaptive Volume Control – Allow to improve acoustic comfort by 50% -Patent US Patent 8116 461</b>	
Nb Sensor Inputs	8 shared with music and paging inputs
Max Nb Sensors/Input	6
Control	24/7 system diagnosis (requires a computer running Project Manager Software)
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.
<b>Music and Paging</b>	
Music and Paging Inputs	8 (shared with Adaptive Volume Control inputs)
Music and Paging Mixer	Independent for each output channel
Music and Paging Volume	30 to 88 dBA in 0.1 dB steps and mute
Music and Paging Equalizer	20 1/3 octave bands
<b>Touch Screen Control</b>	
Integrated Touch Screen	Allowing Volume control of the masking sound and music, and selection of preset EQ for each channel
Volume range & step	20 dB range; Step 0.5 dB
Preset Equalizer Selection	Allow the selection of 12 preset equalizers for each channel, or the EQ done with the auto calibration
Password function	Admin and End-User password to enable or disable volume and advance functions
<b>Volume Control Knobs</b>	
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, 2min30sec, 5min, 10min, or 15min
Schedule Mixer	Independent for each output channel: sound masking and/or paging and music
<b>Monitoring</b>	
Monitoring	24/7 system diagnosis (requires a computer running Project Manager Software)
<b>Project Manager Software compatibility</b>	
Project Master	Can be used in the Project Manager software as a Master unit or a Secondary unit
<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 required</u>
Emergency relay input	Allow shut down sound masking on event
<b>Power</b>	
Input	18-24VDC; Max 150W; Power-supply included
<b>Physical</b>	
Size	430mm x 190mm x 44mm (16.9" x 7.5" x 1.75") (1U rack mount brackets)
Weight	1.7kg (3.8 lb), including the power pack
<b>Warranty</b>	
Warranty	5 years
<b>LEED Design</b>	
Acoustic	Provide high quality of Speech Privacy and improve acoustical comfort
Very Low Electric Consumption	High efficiency/low consumption amplifier & daily schedule allowing automatic shut down
<b>Certifications – ETL Listed 3191772</b>	
UL62368-1 – 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 E1573-18 – 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 provided by closed rooms	

Multiple controller units can be networked together to construct large sound masking projects.

