



**madison**AV  
Specialised AV Solutions

# Importance of sound masking in the workplace.

innovate / distribute / support

## Innovate.

MadisonAV is an Australian owned and operated business that innovates, distributes and supports a range of high-quality AV product solutions from globally recognised brands.

We bring together detailed knowledge of AV industry best practice and innovative products from global technology partners.

Our experience supporting AV and broadcast solutions across key market sectors is underpinned by 30 years of insights and customer understanding.



## Distribute.

Connecting you to world-leading brands.

We efficiently connect customers with leading, state of the art solutions through our sales, warehouse and distribution networks across Australia and New Zealand.

Our heavy investment in stock ensures we have what you need, when you need it.

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## Support.

Our team is dedicated to finding the best possible solution for every project.

Our dedicated team provide a successful formula for delivering innovation, agility and practicality for any complex AV project challenges.

From specification assistance, design support, or post sale technical support, our team is right behind you.



## Contact Us.

For more information on sound masking solutions for your next project visit us at [www.madisonav.com.au](http://www.madisonav.com.au) or call on 1800 00 77 80



## Sound Masking.

Sound Masking offers an innovative, simple and intelligently designed solution to the problem of speech privacy, employee comfort and acoustic distractions.

Ambient noise distractions exist in numerous industries and working situations, either due to excessive noise, or environments that are too quiet. Both conditions can result in unproductive workplaces.

To address this problem, Sound Masking allows the ambient sound level to become more uniform, making undesirable conversations and other noise distractions less audible.



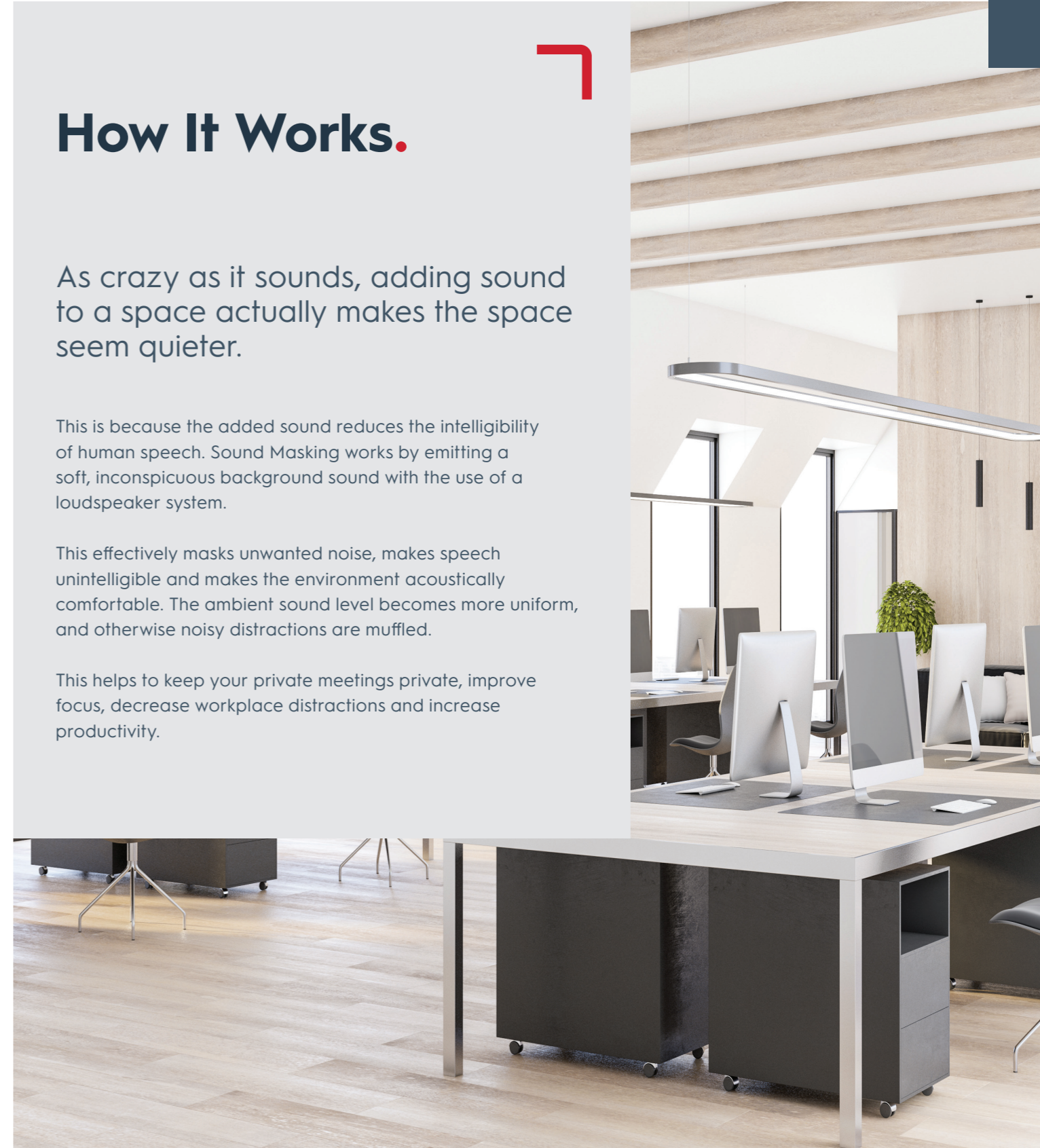
## How It Works.

As crazy as it sounds, adding sound to a space actually makes the space seem quieter.

This is because the added sound reduces the intelligibility of human speech. Sound Masking works by emitting a soft, inconspicuous background sound with the use of a loudspeaker system.

This effectively masks unwanted noise, makes speech unintelligible and makes the environment acoustically comfortable. The ambient sound level becomes more uniform, and otherwise noisy distractions are muffled.

This helps to keep your private meetings private, improve focus, decrease workplace distractions and increase productivity.





# The Benefits.

## Productivity Gains

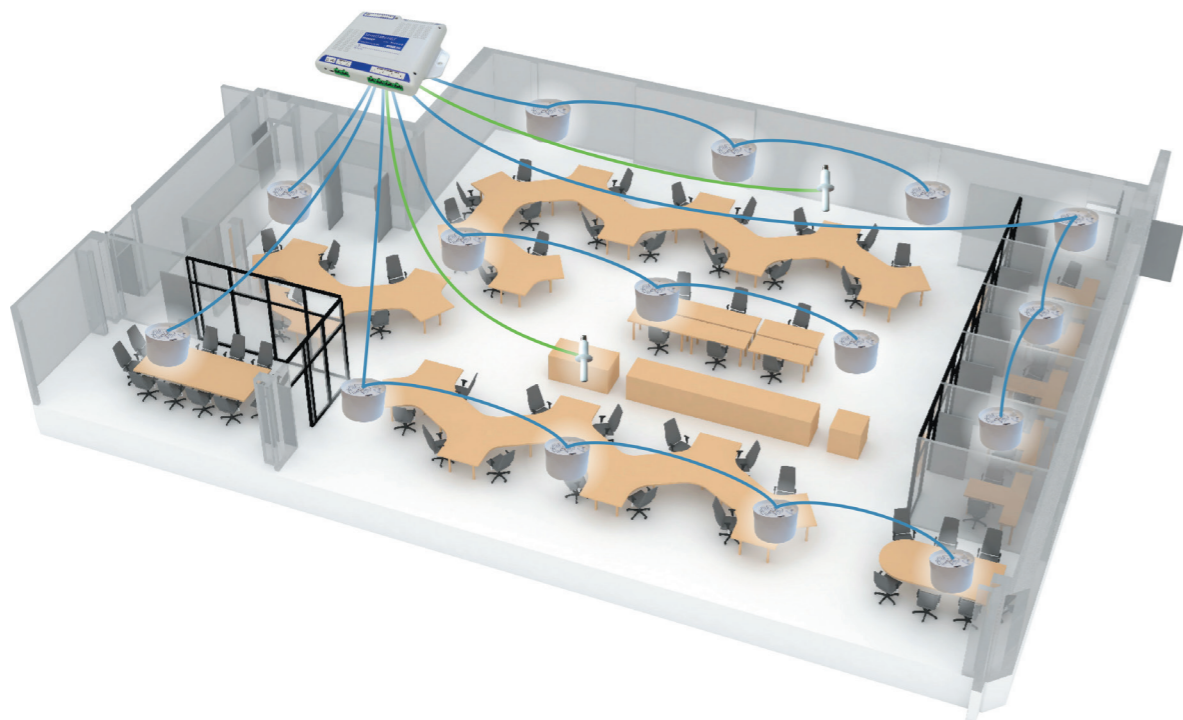
Independent studies show a 5-20% increase in productivity with properly implemented adaptive sound masking, making undesirable conversations and other noise distractions less audible. The result: employees are less distracted, they are able to concentrate better, and their productivity rises measurably!

## Comfort

Adaptive Sound Masking technology is a unique feature, automatically adjusting the noise level to provide continuous comfort levels for inhabitants of the space. Background noise is increased during very active periods, and is more discreet when the area is quieter.

## Greater Confidentiality

Closing the door to an office no longer guarantees speech privacy. Sound Masking can help by making voices unintelligible outside of, and between meeting spaces, creating a completely confidential workplace. Reducing the reliance on baffling and other acoustic treatment has the potential to create significant savings at build time.



# Who Needs Sound Masking ?



### Corporate.

Open Plan Office  
Closed Offices  
Meeting Rooms



### Education.

Huddle Spaces  
Research Labs  
Libraries



### Gov / Defence.

Courtrooms  
Secured Facilities  
Law offices



### Retail.

Specialty Boutiques  
Retail Bank Branches  
Pharmacies



### Hospitality.

Reception Areas  
Hotel Rooms  
Conference Spaces



### Healthcare.

Hospital Rooms  
Private Clinics  
Exam Rooms

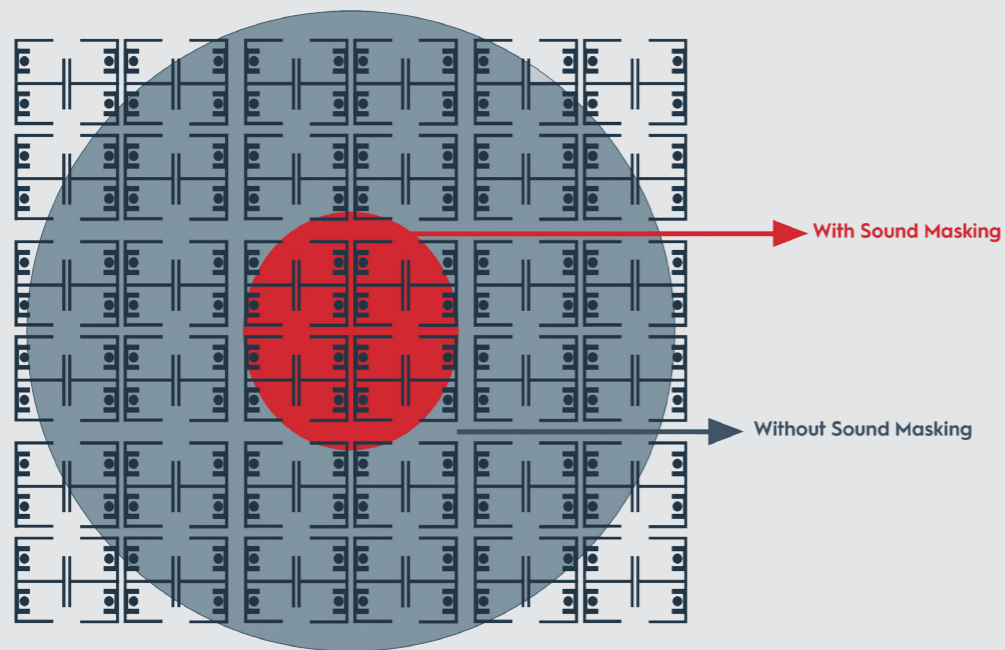


### Finance.

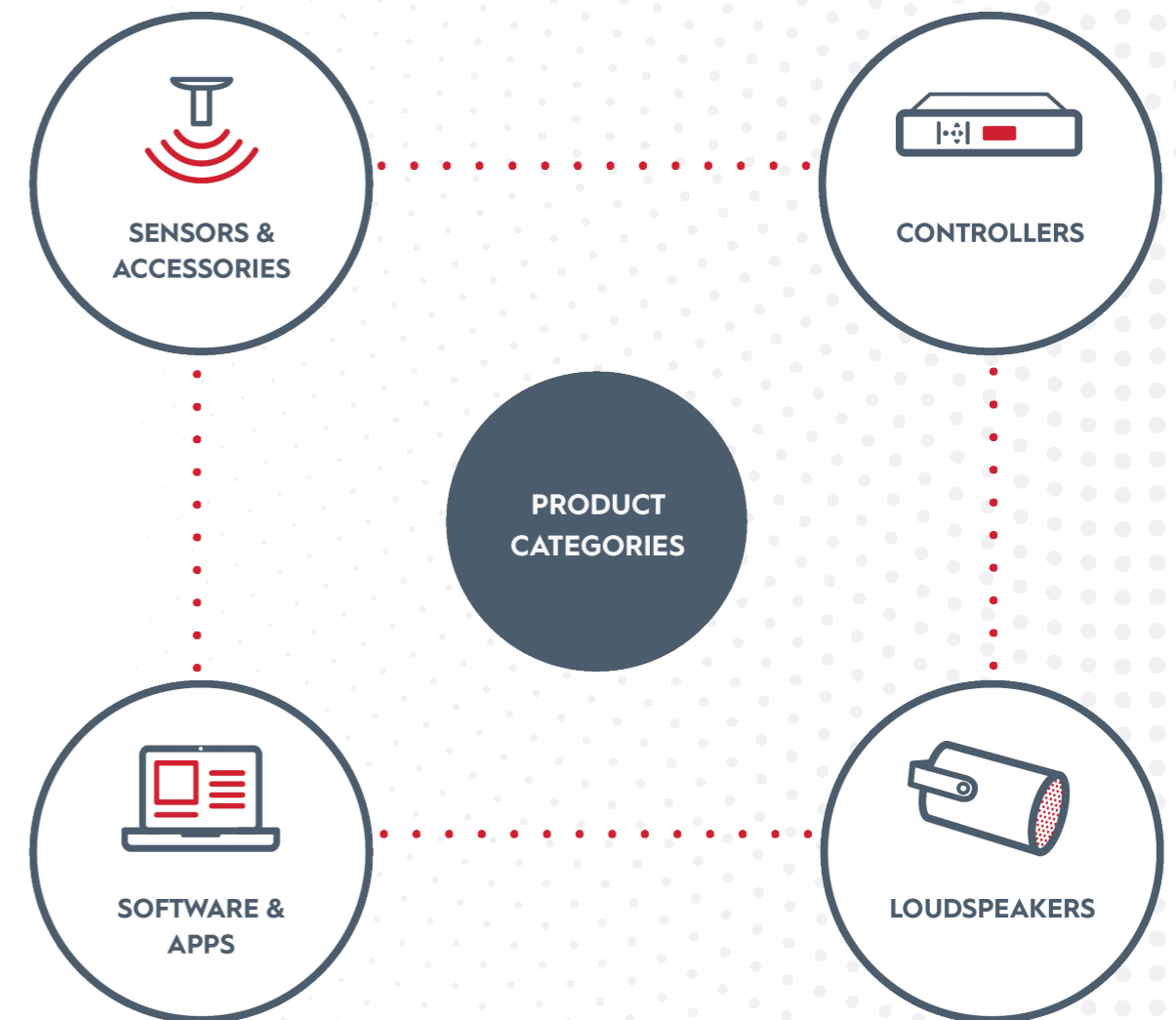
Call Centres  
Board Rooms

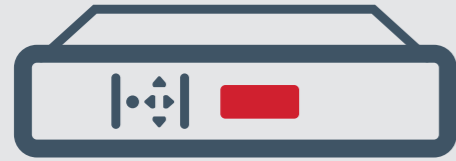
# Reducing the Sphere of Influence.

Sound masking raises the acoustic comfort level by reducing the sphere of influence. In a standard open office environment without sound masking the sphere of influence in which conversations are a distraction is up to 12m. Sound masking can reduce this sphere of influence to just 5m. This drastically reduces the distraction and raise productivity by a measurable amount (independent studies point increase of 5-20% in productivity gains). Ask MadisonAV about our ROI calculator.



MadisonAV designs and supplies sound masking solutions to suit individual spaces and environments, using our suite of Roadworx Sound Masking products. Roadworx Sound Masking offers an innovative, simple and intelligently designed solution to the problems of speech privacy and acoustic distractions.





## CONTROLLERS

Sound masking controllers include all key components required to generate high quality masking sound and achieve optimal speech privacy in any environment.

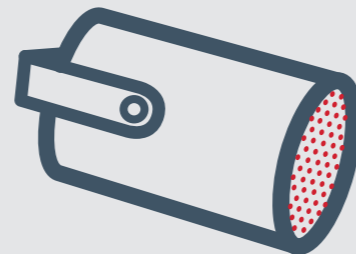
With the option to be installed in the plenum space above the ceiling tiles or rack-mounted in your electrical/server room.

By combining controllers with one another it allows for high flexibility and scalability with the design. Available as wired or a wireless network, enabling you to easily manage them from wherever you are.

## LOUDSPEAKERS

The right sound masking system needs to seamlessly and gracefully integrate with your existing infrastructure while providing optimal masking sound throughout the day.

Roadworx offer a vast selection of sound masking loudspeakers, providing the optimal masking sound across a variety of layouts from open plan concepts to closed offices and hybrid, activity-based workplaces. The adaptable range can also work within the many diverse interior design trends and materials of the modern day office such as exposed ceilings, movable glass walls, sliding doors, skylights, acoustic tiles.



## VOLUME CONTROL SENSORS

Office spaces, are dynamic environments where ambient noise and the amount of distractions vary constantly throughout the day. To be truly effective, sound masking must seamlessly increase as the office gets busier and become more subtle as things go quieter. Volume control sensors make this possible.

To ensure optimal usability of your sound masking system, having the ability to manually adjust the volume in key office areas via touchscreen wall mounted control panels and volume knobs that make fine-tuning sound masking to your taste quick and easy.



## MANAGEMENT SOFTWARE

The perfect sound masking system is not just about providing greater speech privacy and acoustic comfort to office workers. It's also about empowering end-users to make the most of this technology through simple interactive controls and visually-rich graphical interfaces.

Adjusting the sound masking and/or background music volume in a specific office area should be easy for any occupant, regardless of skill level. Similarly, setting volume levels to automatically increase or decrease. However large or small the sound masking system, it should be centrally manageable with all key components and parameters at your fingertips.



## Unique Features.



### Automatic Equalisation Process.

A 340 narrow band equalisation (instead of the usual 20 1/3 octave bands) ensures the production of uniquely smooth, regular and comfortable sound masking, irrespective of the acoustical characteristics of the work space.



### Networked Ready System.

The Roadworx Sound Masking System is very flexible. With both small and larger masking zones, it combines the flexibility of network systems and the cost efficiency of centralised systems.



### Real-Time Adaptive Volume Adjustment.

The system continuously adjusts the masking sound level based on ambient noise measurement. In a busy work area, the masking sound increases. It decreases when the work area quiets down.



## Automatic Equalization Process.

### Roadworx Sound Masking Ensures Precise Adjustment of the Masking Spectrum

**The challenge:** To produce optimum masking sound for all work space characteristics. Parameters such as size, type of ceiling, wall coverings, and furnishings have a direct influence on the propagation of sound masking. If the masking system is not properly calibrated to the specific conditions of the room, it becomes ineffective and/or irritating.

**The advantage:** Roadworx Sound Masking adapts to characteristics that are specific to each work environment. The unique calibration system uses a sensor to measure the acoustic response and the background noise in the space. Based on this data, it automatically calculates the noise spectrum that must be used to emit a soft, uniform, and non-disruptive masking noise.

### Rapid Calibration, Accurate Results

With the Roadworx Sound Masking System, a masking zone can be completely calibrated easily - thanks to the automatic calibration process. It is quick, precise and provides an unparalleled regular smooth and comfortable sound masking spectrum.

The calibration quality is measured by the system's integrated frequency analyser. At a glance, it provides indications as to whether the masking generated is in complete conformity with the desired sound spectrum.



## Networked Ready System.

### Take Control of Your Environment.

#### Wired and/or Wifi Networked Sound Masking System

The SmartSMS-NET Project Manager Software is very flexible, it can cover small or large masking zones. It combines the flexibility of a networked system and the cost efficiency of centralised systems with the functionality for changes to be made very easily due to the layout being integrated into the software.

- Wireless network simplifies wiring and connection
- Installation costs are minimised as proprietary cables are not mandatory
- Efficient and easy to operate
- State of the art graphical user interface
- The ergonomics of the software allows faster interventions
- For each system installation, a quick course can be offered

#### SmartSMS-NET Mobile Volume Control Application

Carry your own volume control with you at all times. The user-friendly mobile app makes it easy to adjust masking, paging and background music volume, for any specific zone within your office. Straight from your Android or Apple smartphone with a simple touch - Available on:





# Real-Time Adaptive Adjustment.

## Masking Volume According to Ambient Noise.

An office space is a dynamic environment in which ambient noise and the volume of sound distractions vary a great deal depending on the schedule and activities underway. To be optimal, sound masking must adapt to changes. It must increase during very active periods, and become more discreet when the area is quieter.



## Effective Masking at All Time.

Our adaptive adjustment system identifies variations in ambient noise in real time, from signals supplied by sound level sensors installed in the ceiling of the work space. And, thanks to an advanced signal-processing technology, it automatically adjusts the asking volume depending on the intensity of conversational noise and other noise distractions.



## Real-Time Features

- Control of masking volume based on the level of disturbing noise in a room.
- Disturbing noise is measured using sound level sensors installed in the ceiling.
- Masking sound level is adjusted automatically in real-time.
- Adjustment rate, high limit and low limit are programmable separately, for each zone.
- An input mixer allows for the combination of any active input with any output channel.

# Safety Certifications.

	<ul style="list-style-type: none"> <li>ETL Listed UL / ULC 60065: Audio, Video and Similar Electronic Apparatus-Safety Requirements</li> <li>E TL Listed UL 2043 Standard for Fire Test for Heat and Visible Smoke Release</li> <li>EN 55103-1, 2- FCC Electromagnetic compatibility for audio &amp; video apparatus</li> <li>Electrical Code for Plenum Installations</li> <li>Compliant with all technical regulations of the Eurasian Customs Union (EACU)</li> </ul>
	<ul style="list-style-type: none"> <li>ASTM E1374-06 (11)-Standard Guide for Open Office Acoustics and Applicable ASTM Standards</li> <li>ASTM E1573-09-Standard Test Method for Evaluating Masking Sound in Open Office</li> <li>ASTM E1130-08-Standard Test Method for Objective Measurement of Speech Privacy in Open offices</li> <li>ASTM E2638-Standard Test Method for Measurement of Speech Privacy Provide by Closed Rooms</li> </ul>
	<ul style="list-style-type: none"> <li>Exceeds the requirements of LEED-V4 Acoustic Performance related to sound masking systems</li> <li>Uses of high-efficiency amplifiers and electronic components to minimize energy consumption</li> <li>Shut-down function for zero energy consumption outside of normal operating hours</li> </ul>
	<ul style="list-style-type: none"> <li>Compliant to the European directive 2002/95/EC Restriction on Hazardus Material also known as Lead-free (no Lead (Pb), Cadmium (Cd), mercury (Hg), Hexa-Chromium(Hex-Cr )</li> <li>Adheres to the principle of the Directives on Waste Electrical and Electronic Equipment (WEEE) of the European Commission</li> </ul>
	<ul style="list-style-type: none"> <li>Can be linked to a Crestron Building management system</li> </ul>





# Connect with us.

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