

# ENSURE SPEECH PRIVACY MASK INTRUSIVE NOISE LOW ENERGY, LOW COST





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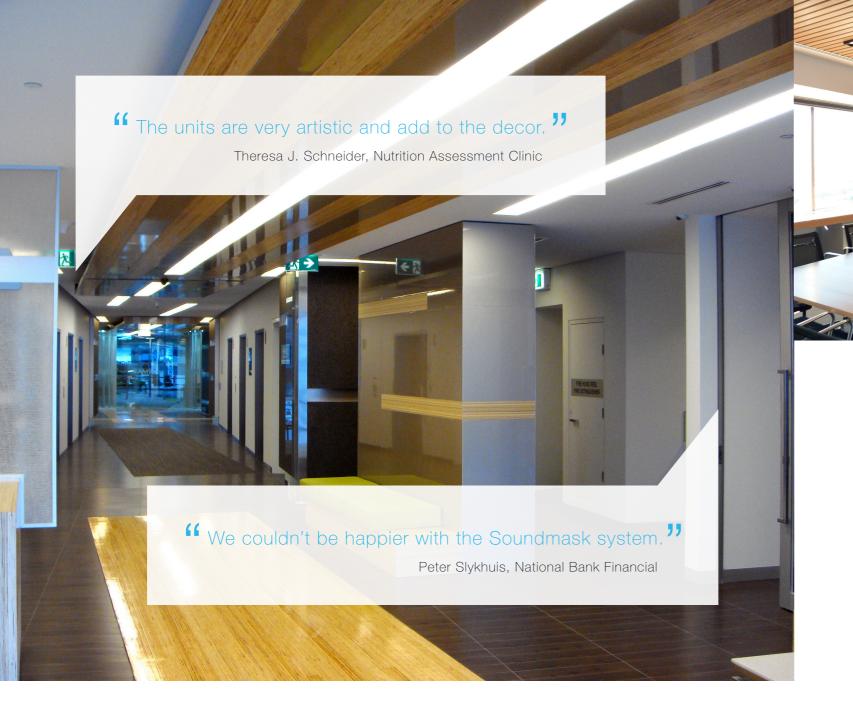




Many thanks to Soundmask
Australia for their innovative
help and advice in overcoming
a problem in the provision of
speech privacy. ""

Dr David Wylie Southport Anaesthetic Services





# SOUNDMASK COMPANY

ESTABLISHED IN 1989, SOUNDMASK IS A FAMILY OWNED AND OPERATED BUSINESS BASED IN AUSTRALIA WITH A WORLDWIDE DISTRIBUTION NETWORK. NO MATTER WHERE YOU ARE LOCATED, SOUNDMASK CAN HELP SOLVE YOUR NOISE PROBLEMS WITH A PERSONALIZED SOLUTION.

# SOUNDMASK CREDENTIALS

Soundmask's installations span Australia, Canada, China, Europe, Hong Kong, New Zealand, the UK the US. We develop our own technology and are constantly innovating and improving our systems.

Soundmask's systems are developed to meet virtually any acoustic requirement and feature "plug and play" technology for easy installation. We have spent time and money developing technology that not only works beautifully, but looks great.

Soundmask's hardware complies with all international certification requirements, as well as voluntary codes like ISO-9000 and RoHS. We developed our systems with the humidity of far north Queensland in mind and our systems are therefore suitable for almost all climatic conditions.

Simplicity and energy efficiency is our priority.

As a result, our systems are modular, so each space is designed with only the necessary hardware, not unnecessary integrated extras.

This allows a system installed in a typical high rise building to draw approximately the same energy as one desktop PC. For smaller systems the energy consumption is a fraction of a light bulb. In fact, an average Soundmask system will cost around \$25.00 per annum to run.

Our size allows individualized service.

Soundmask consultants are available before, during and after completion of the installation — ready and willing to assist with any queries or concerns. We are small enough to cater for individuals but big enough to comfortably supply and install Soundmask systems in multiple high rise buildings.

SOUNDMASK SOLUTIONS SOUNDMASK SOLUTIONS











# SPECIALIST TECHNOLOGY FOR CONTINUOUS SOUNDMASKING SERVICE

At Soundmask, we take pride in the level of research and development behind our systems. Custom designed for the space specified, our systems are not just off-the-shelf PA speakers and white or pink noise. Our modular systems are cost effective compared with both structural changes and our competitors. Soundmask systems come in a range of sizes and modes of operation to suit any space, and are a natural fit for green rated buildings.



# RETROFIT OR DURING CONSTRUCTION

Soundmask's systems offer the flexibility of installation during or after construction.

For large projects where acoustic design is a major consideration, an acoustic consultant will specify a Soundmask acoustic sound masking system. The system can be installed by the electrical contractor\* or one of our specialist installers.

For smaller projects or retrofitting, an acoustic consultant can specify the system or Soundmask can design and install a system to suit the space and requirements.



# LOW ENERGY, LOW COST AND GREEN

When installed in a typical high rise building, a Soundmask system will draw approximately the same energy as a desktop PC. For smaller systems the energy consumption is a fraction of a light bulb. In fact, an average Soundmask system will cost around \$25.00 per annum to run.

This unique quality means that Soundmask's acoustic sound masking systems are preferred as a solution for green rated buildings where energy consumption and materials are equally important in achieving a green rating such as BREEAM (United Kingdom), LEED (United States and Canada), DGNB (Germany) and NABERS (Australia).



## 25 YEARS EXPERIENCE, QUALITY ASSURED

For decades, Soundmask has developed its own technology and is committed to continuous improvement. We are a dedicated sound masking business, not just a PA business that dabbles in white noise. This ensures that Soundmask produces quality systems that are purpose designed and built for sound masking service.

New products and system components are developed in-house, with testing internally and externally by independent testing laboratories in Australia and internationally.

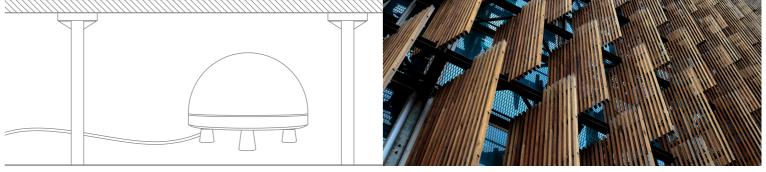
<sup>\*</sup> To ensure consistent quality, all installers must undertake Soundmask's training.

SOUNDMASK SYSTEM TYPES SOUNDMASK SYSTEM TYPES

SOUNDMASK'S SYSTEMS HAVE BEEN DEVELOPED OVER 25 YEARS.

EASY TO INSTALL AND EASY TO USE, THERE IS A SYSTEM FOR ANY SPACE
THAT REQUIRES AN ACOUSTIC TREATMENT. IN OUR EXPERIENCE, INSTALLING
A SOUNDMASK SYSTEM IS USUALLY THE ONLY ACOUSTIC TREATMENT NEEDED.







## IN CEILING SYSTEM

The in ceiling system is the most commonly installed Soundmask system. Installed within existing suspended ceilings, or during construction, the system is concealed overhead.

# CASE STUDY COMMONWEALTH BANK

Consisting of two nine-storey buildings and built to accommodate over 4,500 staff, the Bank's ultra-efficient design achieved a 6 Green Star and 5 star NABERS rating.

Due to the noiseless chilled beam air conditioning and fresh air systems, the interior was so quiet that any small sound would be a distraction, and any conversations would be easily overheard.

As with other "green" buildings, installing a Soundmask system throughout each high rise tower introduced a comfortable background sound to reduce distracting noise and create speech privacy in an energy efficient manner.



## UNDER FLOOR SYSTEM

Under floor systems are used where there are no suspended ceilings (where a traditional system would be placed). The transducers are located under the floor with other services.

# CASE STUDY COUNCIL HOUSE 2

The Council House 2 building, like other 6 Green Star rated buildings, required the addition of sound masking to correct the uncomfortably quiet office environment.

However, the innovative ceiling design also meant that the services, including Soundmask's system, needed to be installed under the Tasman Access floor. This floor was manufactured from steel and concrete composite. Soundmask's system achieved the correct penetration of sound via its powerful transducers.

SOUNDMASK SYSTEM TYPES SOUNDMASK SYSTEM TYPES

SOUNDMASK'S SYSTEMS ARE DESIGNED TO SOLVE THE PROBLEMS OF SPEECH PRIVACY AND DISTRACTING NOISE. OUR SYSTEMS ARE LOW COST, ENERGY EFFICIENT AND QUALITY ASSURED.







## OPEN AREA SYSTEM

Open area systems offer the option of a Soundmask system where an under floor or ceiling system cannot be installed. For example, in lofted ceilings, like heritage buildings that have been re-fitted. There are also options for the Soundmask transducers to be suspended from the ceiling as a design feature.

# CASE STUDY SYDNEY OPERA HOUSE

The Sydney Opera House box office features an open plan design with low partitions which created noise problems in the call centre. The premises are within a listed heritage building, so any modifications need to conform to heritage requirements.

Due to the vaulted (saw tooth) ceiling structure,
Soundmask used exposed transducers with acoustic
discs for an even spread of sound. The transducers
blended with the existing light fittings to ensure that
they were visually non-intrusive.



# SURFACE MOUNTED SYSTEM

Surface mounted systems are used where speakers cut into walls or ceilings are preferred.

# CASE STUDY MEDICAL SUITES

Southport Anaesthetic Specialists is a small medical practice where a number of consultants and their secretaries share offices and an open plan reception area. Speech privacy was compromised whenever health information was gathered at the reception desk and via telephone.

Soundmask installed five "cut in" ceiling speakers and a shelf generator, solving the practice's speech privacy problems and ensuring that the practise complies with Health Privacy legislation.

# SOUNDMASK PRODUCTS

#### SOUNDMASK PRODUCTS

# SOUNDMASK'S SYSTEMS ARE MODULAR SO EACH SPACE IS DESIGNED WITH ONLY THE NECESSARY PRODUCT COMPONENTS, NOT UNNECESSARY INTEGRATED EXTRAS.





UNDER FLOOR TRANSDUCER SM-T-2200 & SM-TU-1650



RACK GENERATOR SM-GR-3100

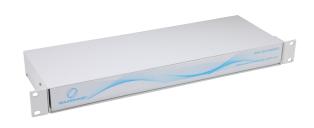


DIGITAL EQUALIZER SM-EQ-2000



CEILING TRANSDUCER SM-T-1200 & SM-T-1650

DIGITAL DISTRIBUTOR SM-DX-4800



DIGITAL AMPLIFIER SM-DA-8000



SHELF GENERATOR SM-GS-3200



ACOUSTIC DISC SM-TD-1300



CUT-IN TRANSDUCER SM-TC-1265/SM-T-1265



ZONE DISTRIBUTOR SM-DR-5000



## RANDOM DIGITAL NOISE GENERATOR SM-GR-3100



Soundmask's SM-GR-3100 rack generator is the backbone of Soundmask's systems and features a microcontroller controlled digital random noise generator with an effective frequency range of 20Hz to 20kHz.

The digitally generated Gaussian noise is passed through a spectrum shaper to flatten its response through the midrange, corresponding to human speech frequencies.

# DIGITAL EQUALIZER SM-EQ-2000



Soundmask's SM-EQ-2000 equalizer is used to shape the output of the SM-GR-3100. Specifically, the unit is a third octave digital equalizer which connects to the generator via two XLR connectors. The random sound is then amplified through a 50W full bridge digital amplifier capable of driving 100 Soundmask transducers.

The generator's output can be adjusted to ramp up when the device is switched on for a more acoustically comfortable start up.

## DIGITAL DISTRIBUTOR SM-DX-4800



The SM-DX-4800 digital distributor features 4 channel input and 8 channel output, selectable 6 bands of parametric EQ per channel, multiple crossover selections and full function limiters.

The unit also features remote computer control through a LAN connection.

## DIGITAL AMPLIFIER SM-DA-8000



The SM-DA-8000 is an 8 channel digital amplifier, with an output of 50 watts RMS per channel @ 8 ohms. It features individual channel level control on the front panel, XLR inputs (received from the

SM-DX-4800) for each channel and stereo banana jack outputs. Being digital, this unit is extremely efficient and delivers uncolored signal direct to the transducer.



## ZONE DISTRIBUTOR SM-DR-5000



Soundmask's SM-DR-5000 zone distributor can be used where separate areas have different needs, but the client wants to spare the expense of multiple generators.

The unit is a five channel volume control, each channel with separate attenuator. It is a single rack unit designed for convenient installation.

Each channel has a maximum loading capability of 200 watts.

## SHELF GENERATOR SM-GS-3200



Soundmask's SM-GS-3200 shelf generator (which can also be wall mounted) is a microcontroller controlled digital random noise generator.

The digitally generated Gaussian sound is passed through a spectrum shaper to flatten its response through the midrange, corresponding to human speech frequencies. The digital amplifier is capable of driving 50 Soundmask transducers.

## CASE STUDY HAMILTON CALL CENTER



Hamilton Call Center is a government service provider located in Hamilton, Ontario. Due to the private nature of conversations within the space, speech privacy is a key concern.

The client approached Soundmask Canada, concerned about speech privacy problems within the private offices and meeting rooms, as well as in the open concept call center area itself which doubles as a training area.

The different areas required different masking treatments, which called for separate zones.

Soundmask Canada provided a system, including Soundmask's SM-DR-5000, that allows trainers to turn the masking down during training sessions where speech intelligibility is required, and turn the masking up when agents are using the training room as a call center.

# CUT-IN TRANSDUCER SM-TC-1265/SM-T-1265



Soundmask's transducers are purpose designed and manufactured for continuous sound masking service. Soundmask's cut-in transducers are suitable where either or both suspended in-ceiling systems are not practical and a more directional sound is required. This transducer exhibits excellent low frequency performance.

Soundmask transducers contain no heavy metals and are RoHS compliant.

#### SOUNDMASK TRANSDUCERS

The design of the transducers makes installation so easy. ""

Roger Hughes, Authorised Installer

# CEILING TRANSDUCER SM-T-1200

The SM-T-1200 is the most commonly used transducer in Soundmask's range. It is purpose designed for continuous sound masking service and aesthetics. It is available in black or white colors. The SM-T-1200 comes complete with a 500mm transducer lead with inlet and outlet connections and a variable slide fitting for attachment to the ceiling is fixed to the lead which is normally set at 300mm.

ACOUSTIC DISC SM-TD-1300

Soundmask's acoustic disc is used with a transducer in an open area or where there are no reflective surfaces, like in green buildings where thermal or sound absorbent materials are applied to the underside soffit of the structural ceiling.



The disc's proprietary shape was designed by Soundmask's in-house technicians to reflect sound evenly throughout the space. When positioned above the suspended transducer, the disc opens up the speaker grid and enhances sound distribution.

Cables are pre-cut for easy installation with mating plugs to ensure uniform phase in the wiring.



All transducers are purpose designed and manufactured for continuous sound masking service.



Sturdy ABS plastic exteriors with halogen free wiring and energy efficient low watt output.



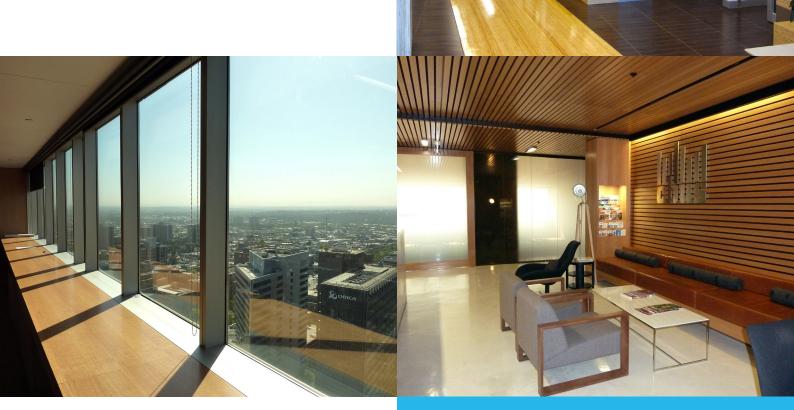
# CEILING TRANSDUCERS SM-T-1650 & SM-TH-1650

Soundmask's SM-T-1650 is slightly larger than the SM-T-1200 and is also available inverted (SM-TH-1650), as pictured above, for lofted ceilings or open area systems. Both models come complete with a 500mm transducer lead with inlet and outlet connections and a variable slide fitting for attachment to the ceiling is fixed to the lead which is normally set at 300mm.

# UNDER FLOOR TRANSDUCERS SM-T-2200 & SM-TU-1650

The SM-T-2200 and larger SM-TU-1650 transducers are designed for powerful penetration of access floors made from steel and concrete. The "feet" raise the transducers 35mm from the floor for an even spread of sound. Like the other transducers, the under floor transducers come complete with a pre-cut six metre connecting cable with inlet and outlet connections for easy installation.





# CONTACT











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