



LNE Systems

**PROEL**  
TECHNOLOGY as ART

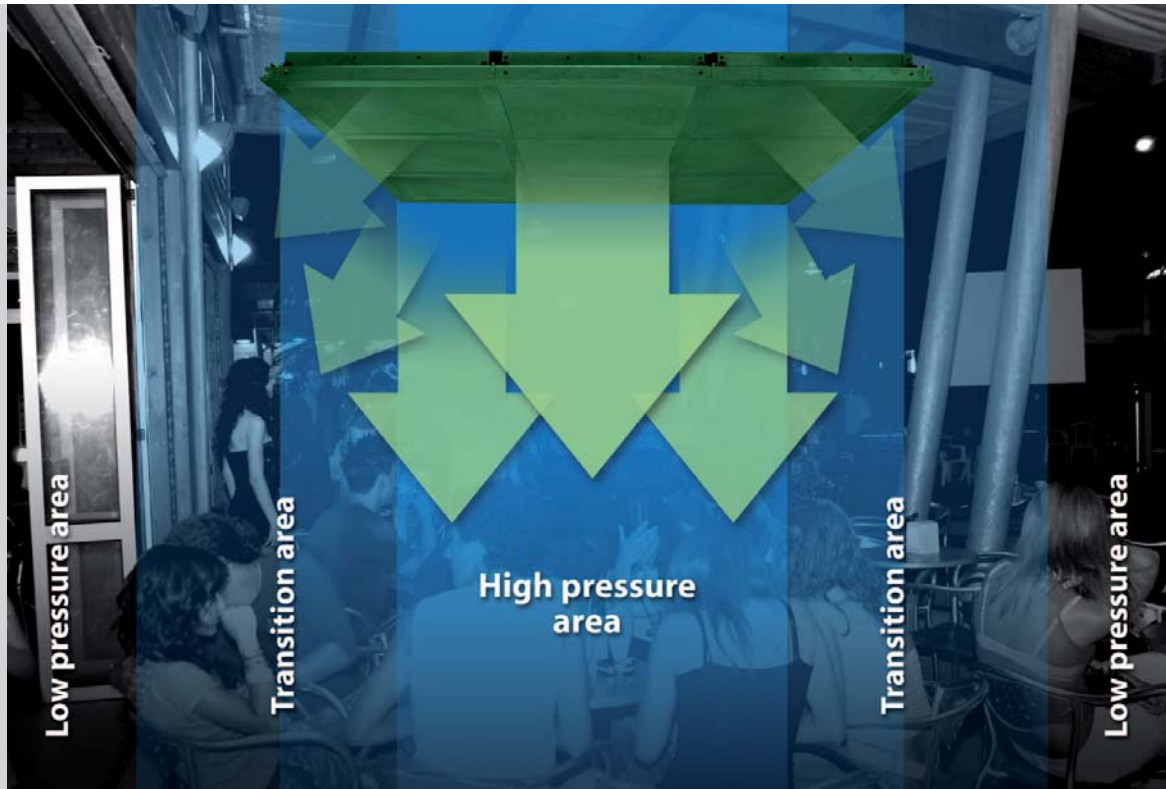


# LNE SYSTEM

LOW NOISE EMISSION

For all applications where you want high acoustic performance both in terms of sound pressure and audio quality, but need the sound to be focused in a small area with minimal disturbance to the surrounding area (dance floors and outdoor settings such as pubs and clubs where a separation of different areas is required etc.). Proel provides a new solution that is both innovative and highly technological.

The Proel Modular Matrix Speaker system is a solution for outdoor installations where the sound needs to be contained to a specific area or in confined spaces where the sound level needs to be very different between adjacent areas. The matrix is comprised of the SC965P modular ceiling speakers, which are highly directive due to manipulation of the source interaction - minimizing noise emission in the surrounding areas.



The reduction of the pressure level outside the voiced zone is very marked – and the effect is greater the larger the array size / area to be reinforced.

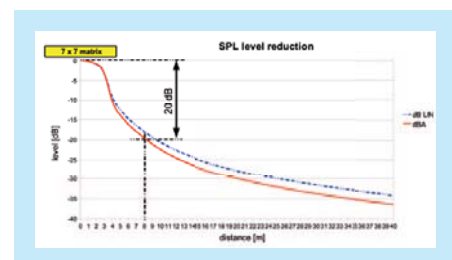
The Proel modular matrix solution provides guaranteed results in difficult situations where the use of a traditional system results in excess sound outside the desired listening area.

The matrix is highly scalable, from the minimum recommended set-up of 9 x SC965P (3 x 3 matrix) elements – (for an area of about 10 square meters), up to systems that can cover hundreds of square meters. The Proel modular matrix can be used for the reinforcement of small and medium-sized areas with an installation that is simple, fast and secure.

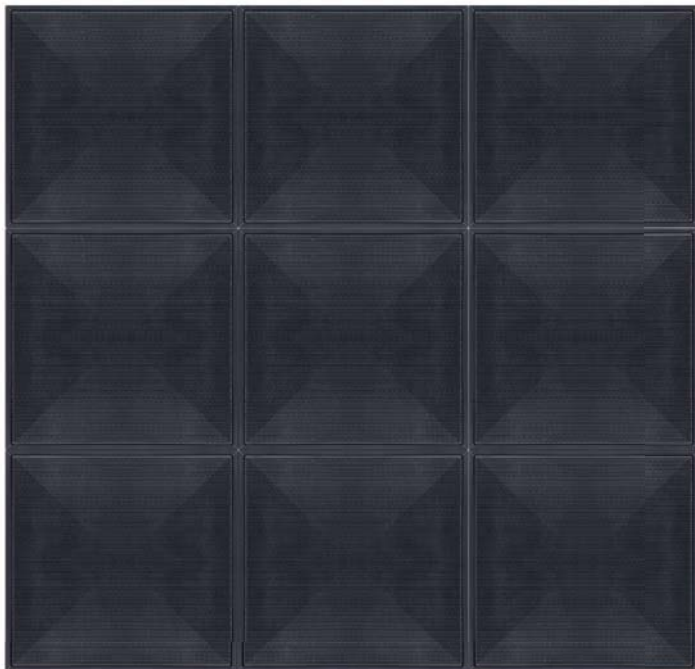


MODEL	SC965P
<b>System type</b>	full-range ceiling loudspeaker matrix element
<b>Frequency response</b>	80 Hz - 16 kHz
<b>Maximum SPL (peak)</b>	120 dB @ 1m
<b>Components</b>	9 x 6.5" full range
<b>Nominal impedance</b>	36 ohm
<b>Sensitivity</b>	88,3 dB SPL (1W @ 1m)
<b>Power handling (AES)</b>	400 W
<b>Power handling (programme)</b>	800 W
<b>Horizontal coverage (-6dB)</b>	depending on array size
<b>Vertical coverage (-6dB)</b>	depending on array size
<b>Directivity index</b>	depending on array size
<b>Suspension system</b>	built in suspension system
<b>Connectors</b>	2 x Neutrik Speakon NL4MP linked
<b>Construction material</b>	steel-rubber composite cabinet with internal bracing
<b>Finish</b>	paint finish
<b>Net weight</b>	16 kg
<b>Dimensions (WxHxD)</b>	60 x 60 x 16 cm

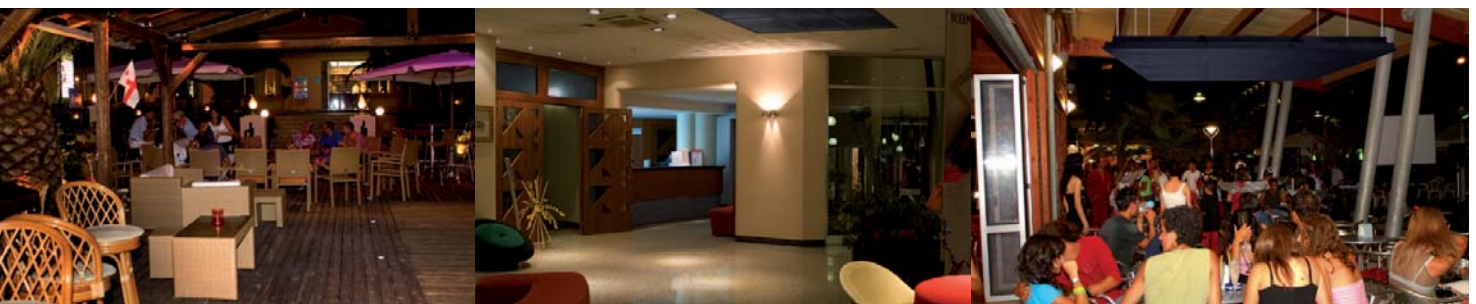
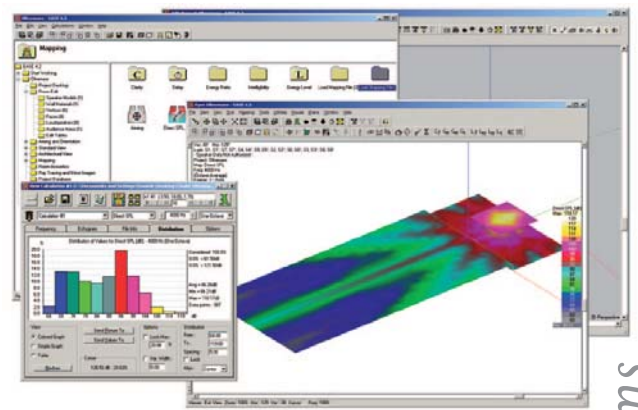
**THE SC965P** - module is a highly engineered ceiling speaker designed using CAE/CAM and is the foundation of the system. This low-profile 60 x 60 cm module features 9 high power, wide bandwidth speakers. The speakers themselves are designed to withstand high excursion, feature a demodulating ring at the base of the magnetic circuit which results in very low distortion levels and the serial connection and electronic protection ensure a high level of reliability. The SC965P modules can be set-up in different ways: Suspended side by side using the inbuilt connection points to give the look of a "standard" false ceiling or suspended utilizing an optional flying mechanism. SC965P is simple to assemble, disassemble and store, and is completely sealed – requiring no additional treatment for the installation.

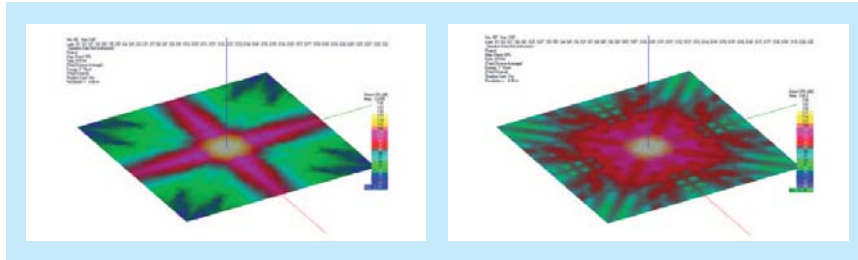


Tech info

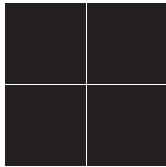


**3X3 MATRIX**





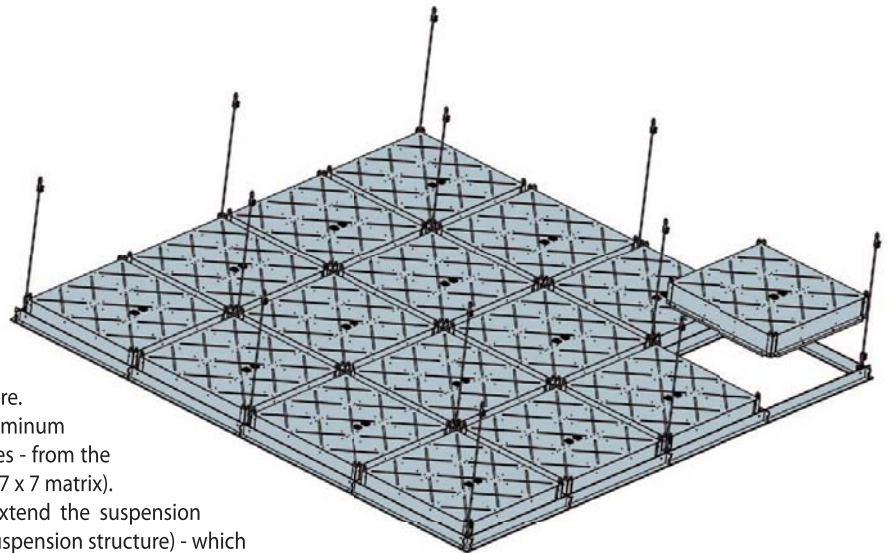
matrice 6 x 6



matrice a configurazione circolare



• Through simulation tools, it is possible to ascertain the best possible set-up – which could also mean a departure from the classical square matrix form. The rectangular or square matrix can produce unwanted side lobes of emission that can be minimized by creating a "circular matrix".



### SUSPENSION STRUCTURE

The SC965P modules can be suspended individually and can be integrated into a standard false ceiling structure. Installation is made easy with the Proel KPTSC965 aluminum suspension system which is available in all standard sizes - from the KPTSC965M3 for a 3 x 3 matrix to the KPTSC965M7 for a 7 x 7 matrix). KPTSC965L connecting beams are also available to extend the suspension system up to a maximum of a 15 x 15 matrix (for each suspension structure) - which equates to a reinforced area of about 80 square meters..

Through the dedicated suspension structure is easy to create installations in situations where multiple attachment points are not available, such as under awnings or on a truss structure.





In the picture above, 24 SC965P modules,  
standard cm 60x60.





**DS112P**  
**DS112PT**

**LNE SYSTEM SERIES 2-WAY FULL-RANGE HIGH DIRECTIVITY PASSIVE SPEAKER**

Engineered and designed be a system capable of providing sound reinforcement in a limited area minimising the emission of noise / disturbance to the surrounding areas. Small in size, the system can be integrated to any structure type ceiling, walls and roofs, both indoors and outdoors.

The speaker is equipped with custom transducers, studied specifically for this project to create a sound that has both high fidelity and high directivity. The DS112P / T is a two-way speaker system with highly controlled directivity.

Its configuration allows it to control directivity as low as medium-low frequencies (around 500Hz), even though the physical dimensions are very small. This marked tendency to control the energy emitted within its cone of radiation especially in the vocal range makes it ideal tool to locate vocal messages in specific areas. The system DS112P / T is designed to operate in the vertical direction, from top to bottom, so that its coverage area is identified in the space below it, within a cone of about 80 degrees. Outside of this area of coverage, the sound level is reduced as much as 15-20 dB.

The housing of the DS110SP is made of steel, which has been treated and painted to provide the unit with high resistance against atmospheric agents over time.. Degree of protection IP 55 Δ.



**DS110SP**

**LINE SYSTEM SERIES PASSIVE SPEAKER FOR LOW FREQUENCIES**

Engineered and designed to complete the low-frequency response of the DS112PT, the DP110SP is small in size and structure to allow integration into any type ceiling, wall or roofs for both indoor and outdoor installations. The DS110SP features 1 x high excursion 10" woofer.

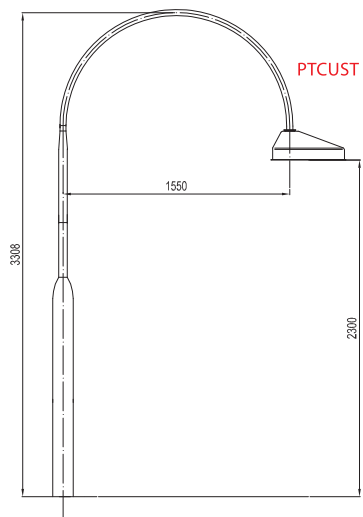
The housing of the DS110SP is made of steel, which has been treated and painted to provide the unit with high resistance against atmospheric agents over time.. Degree of protection IP 55 Δ.

Tech info

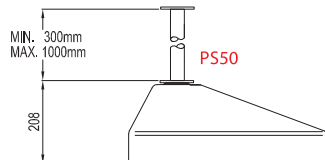
Model	DS112P - DS112PT	DS110SP
<b>System type</b>	Two-way high directivity System MTM circular configuration	SUB
<b>Input power rating (continuous)</b>	300 W (8Ω)	400 W (4Ω)
<b>Input power rating (peak)</b>	600 W (8Ω)	800 W (4Ω)
<b>Nominal Impedance</b>	8Ω (DS112P)	4 ohm
<b>Constant Voltage Binding</b>	100V (only transformer version DS112PT)	-
<b>Power Taps to 100V</b>	25/50/100W (only transformer version DS112PT)	-
<b>Frequency response</b>	110Hz - 16kHz (-3dB), 80Hz - 18kHz (-10dB)	30 Hz - 250 Hz
<b>Maximum (peak) Output</b>	124dB @ 1m	127dB @ 1m
<b>Low Frequency Device</b>	12 x 3.5" wide-band speakers with coil 25mm	10" woofer
<b>High Frequency Device</b>	1 x 1" compression driver with coil 38mm	-
<b>Angular coverage</b>	<78°	omni
<b>Crossover Frequency</b>	2400 Hz	-
<b>Mounting Pole</b>	custom arm or flange (wall / ceiling)	custom arm or flange (wall / ceiling)
<b>Connectors</b>	2 pole cable	2 pole cable
<b>Material</b>	Steel Box (z/c treatment)	Steel Box (z/c treatment)
<b>Finish</b>	P/E Scratch-proof coating	P/E Scratch-proof coating
<b>Color</b>	Custom (RAL code)	Custom (RAL code)
<b>Weight</b>	9 kg	- kg
<b>Dimensions</b>	Ø510 x H208 mm	Ø510 x H208 mm
<b>Protection</b>	IP55 Δ	IP55 Δ
<b>Operational temperature</b>	-20 / +40 °C	-20 / +40 °C



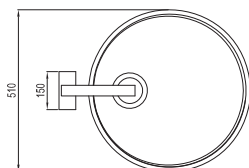
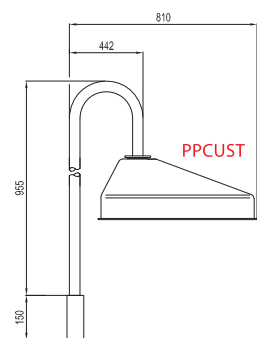
**FISSAGGIO SU PALO**



**FISSAGGIO A SOFFITTO**



**FISSAGGIO A PARETE**





**PROEL**

*International Ltd.*

*London*

*UK*

**PROEL**

*Korea Co. Ltd.*

*Gyunggi-Do*

*KOREA*

**PROEL S.P.A.**

*(Worldwide Headquarters)*

*Via alla Ruenia, 37/43*

*64027 Sant'Omero (TE) - ITALY*

*Tel. +39 0861 81241*

*Fax +39 0861 887862*

*P.I. 00778590679*

*N.Reg.AEE IT 08020000002762*

*info@proel.com*

*www.proel.com*



*www.facebook.com/proel*

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