

EDGE

Commercial and Technical Product Guide



The EDGE project:

INDEX:

1: EDGE- The philosophy	pg:3
2: Design of a World Class system	pg:4
3: SPECIFICATIONS- Not a Clone	pg:8
4: EDGE- Versatility	pg:16
5: MARKET POSITION- Where are we?	pg:20
6: EDGE- Accessibility	pg:22
7: EDGE ON EASE- Technical Assistance	pg:25
8:EDGE-Just Listen	pg:28

APPENDIX:

SECTION 1: EDGE Technical specifications

SECTION 2: WEB LINKS

1:EDGE- The philosophy:

The new **EDGE** sound reinforcement system is a bold step ahead for **PROEL**.

Both as an expansion to the existing catalogue and as a product name all to itself, **EDGE** is a pass into the big league of sound reinforcement.

EDGE is the next level, above the **TFL** series in both application size and quality, it delivers excellent performance at accessible prices.

Truly modular, **EDGE** can be used in many different situations- from small indoor venues to huge outdoor events.

EDGE promotes a top level product for all users, promising quality without compromise.

EDGE shows a new side to **PROEL** Sound Reinforcement, showing us as wanting to grow and having the tools and the ability to do so.

PROEL is able to provide the complete audio system from power amplifiers, digital processors and active splitters to connection panels, cables and flight cases, creating entire **EDGE** Plug and Play systems to customers specific requirements.

EDGE is a high quality system which has an equally high potential to succeed:

- **Technical specifications are similar to the competitors**
- **The sound quality is as good as the competitors**
- **The price is dramatically lower than the competitors**
- **Innovative mechanics and components of the system make it an original product.**

2:Design of a World Class system:

The **EDGE** system is the fruit of a collaboration between **PROEL** Sound Reinforcement engineers and the LiSA Work Group.

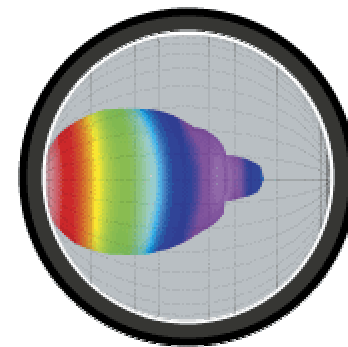
The LiSA Work Group is an Italian consultation studio which consists of several acoustic engineers specialised in the design of large PA systems for live applications. The group is responsible among other systems, for the excellent LiSA line array system- the first true line array made in Italy.

As the first high level, touring grade PA system in the **PROEL** catalogue, a conscious decision was taken to create a traditional cluster array system- by far the most versatile and flexible of the various array methods currently available.

PROEL customers are many and varied, from small shops and bands to large professional PA rental companies. This has always been reflected in the vast range of products in the catalogues. As such it was seen that a versatile system was required- one that could cater for the needs of customers at all levels, from small clubs to large arenas.

Practical needs were taken very seriously in the design of **EDGE**.
Creating a real work tool for the end user,
the system has been designed to be:

- **reliable and sturdy enough to survive touring treatment,**
- **fast and easy to use,**
- **having good coverage control,**
- **having high sonic quality,**
- **optimal matching between electronics and acoustics.**



Every aspect of **EDGE** has been carefully designed and studied:



The Loudspeakers and High Frequency Drivers used in the **EDGE** systems are all custom made in Italy for the systems specifications.

Carbon fibre reinforced cones and waterproof treatments assure long-term reliability and safe operation in any environment.

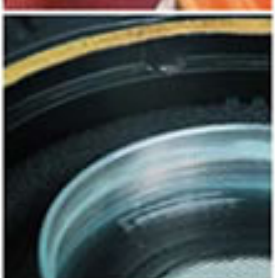


All the transducers used feature an exceptionally high strength motor and in the case of the 21" woofer, a double layer magnet assembly has been used to deliver outstanding mechanical damping giving full control of the bass frequencies.

The Double Silicon Spider centring device assures a high restoring force, controlling the cone motion and greatly increasing the peak power handling as well. The dual-layer voice coil is wound inside and outside of the coil former thus doubling the metal-to-metal heat radiation surface.



This results in a significant amount of power compression reduction. De-modulating ring devices are employed in almost every transducer for maximized mid-range distortion reduction and over-excursion control.



The high frequency elliptic- spheroid wave guide has been specifically designed to give constant coverage and be intrinsically diffraction free.

An intensive study has looked at the vibrations of the speaker cabinet at certain frequencies and measures taken to reduce this effect to a minimum. This study- unique to the **EDGE** system- was presented at the **116th Audio Engineering Society Convention in Berlin in May 2004**.

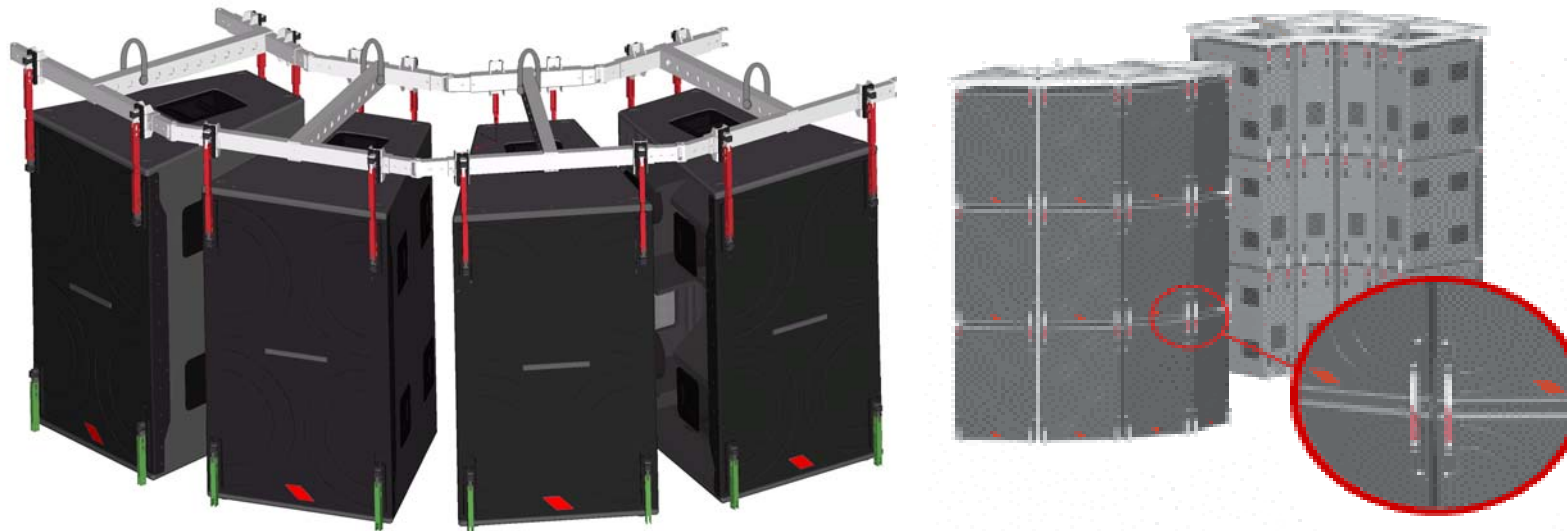
The full report and paper presented can be found at the link:

<http://www.proelgroup.com/edge/downloads.htm>

EDGE has its own flying system. The modular flying bar is capable of holding up to 10 speaker boxes with a 7:1 safety ratio and allows arrays of up to the full 360°.

The inter-speaker connection system allows complete control of the speakers angle when flown in large arrays.

The **EDGE 212P** and **218SP** have the same centre of gravity and approximately the same weight making arraying them together easier.



The **DSO26** digital optimiser is a system processor, which contains presets for various **EDGE** set ups in differing environments and can be programmed by the user. Presets for other **PROEL** speaker systems can be downloaded from the web site. The optimiser also functions as a digital delay and equaliser.



The larger units of the **EDGE** series have been optimised for truck loading- the width of the **EDGE 212P**, **EDGE 218SP** and **EDGE 121SP** is such that they fit side by side, four in a row in a standard truck, making loading easier and transport more secure.

The position and direction of the ergonomic handles on the **EDGE** speakers has been studied to be the most efficient and comfortable for movement and setting up of the system.

3:SPECIFICATIONS- Not a Clone:

The **EDGE** series of speakers has several features that sets it apart from all other similar quality PA systems on the market.

Whilst it is possible to compare the **EDGE** series with other systems in terms of sonic quality and performance, it has not been designed to 'mimic' any other brand.

Various innovations make the **EDGE** series original and unique.

Of these innovations, the one that stands out as being very different from the competition is the use of CO-AXIAL technology:

- The **EDGE 212P** satellite unit consists of two horn loaded 12 " woofers for the mid-range and a 4"/2" mid/high range drivers co-axially mounted.
- The **EDGE 15CXP** monitor has a 15" woofer with a 1.5" compression driver co-axially mounted.
- The **EDGE 12CXP** monitor has a 12" woofer with a 1.5" compression driver co-axially mounted.
- The **EDGE 8CXP** speaker has an 8" woofer with a 1" compression driver co-axially mounted.

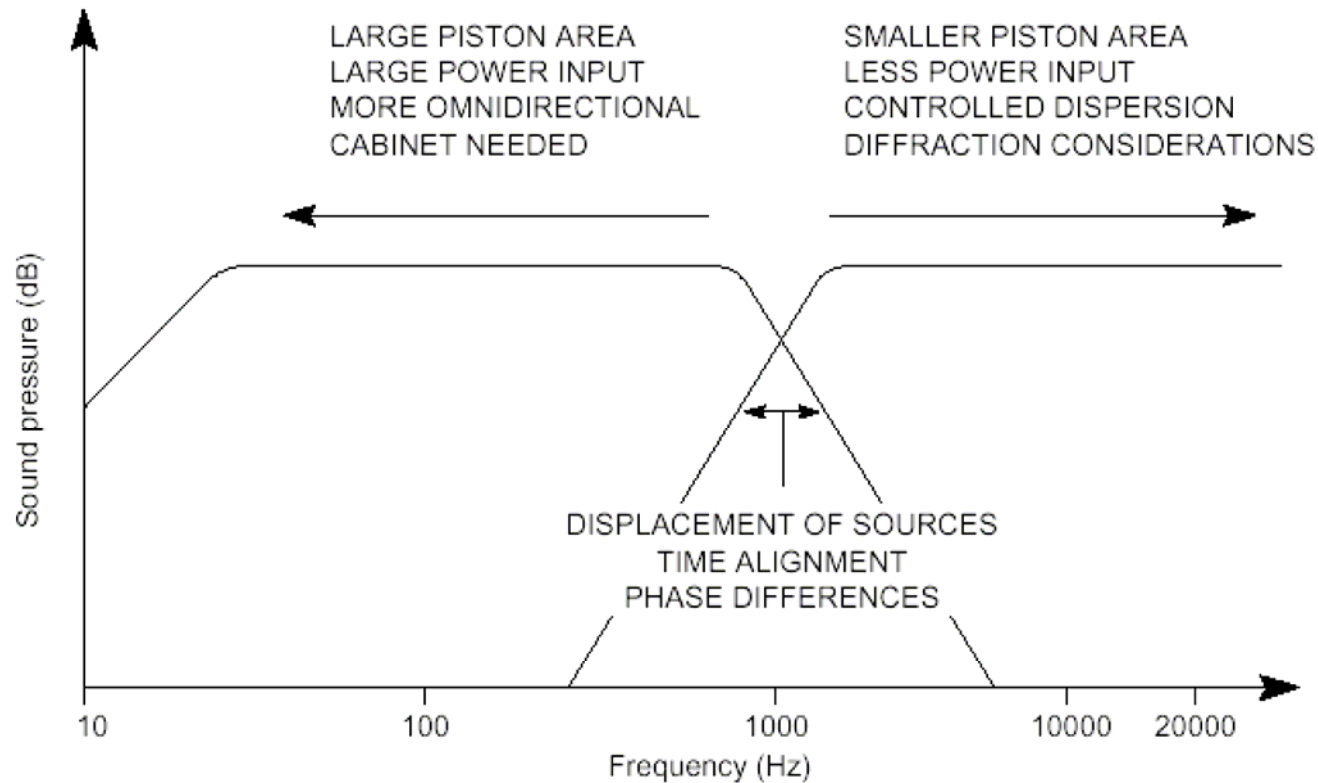
Why CO-AXIAL?

The choice of the coaxial reproduction is a sophisticated one that requires superior effort in the realization of the drivers, but that allows some enjoyable advantages immediately for the consumer:

- **Dramatic reduction of the dimension of the cabinet**
- **Allows us to create a one point source**

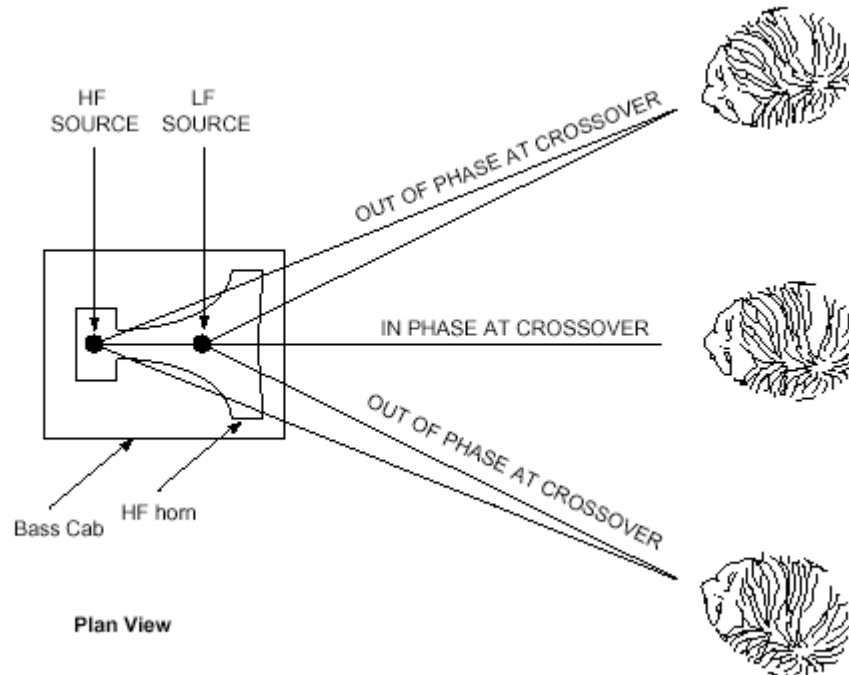
One source is better than two:

Ideally one loudspeaker would be used to reproduce all frequencies. This is not possible in practice due to the different requirements needed. Dividing the audio band in more parts introduces many different problems- the most complex one, as this diagram shows, is the requirement of a crossover network.



Crossover interference:

The crossover zone is very critical in audio reproduction, where more than one driver reproduces the same sound.

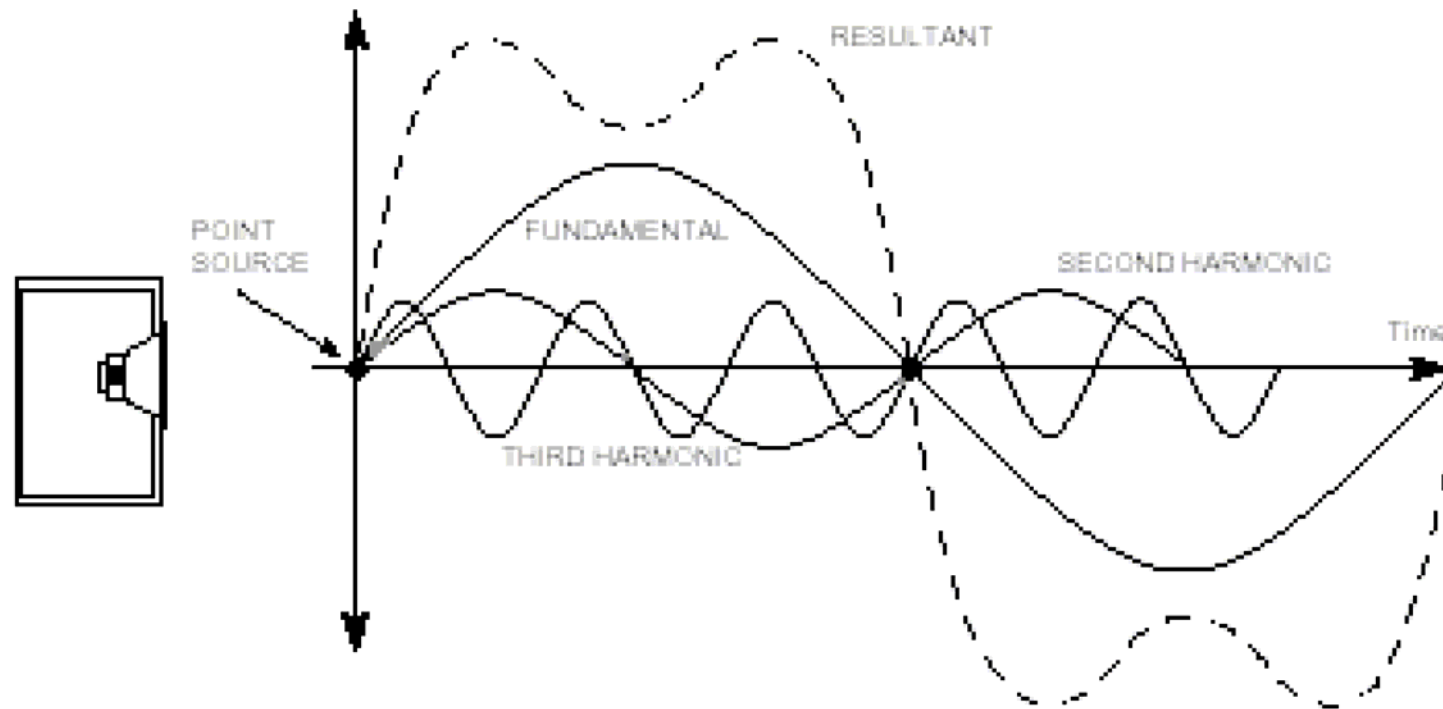


The coincident position of the driver in the coaxial loudspeaker greatly reduces this problem. This is one of the main advantages to this kind of sound reproduction.

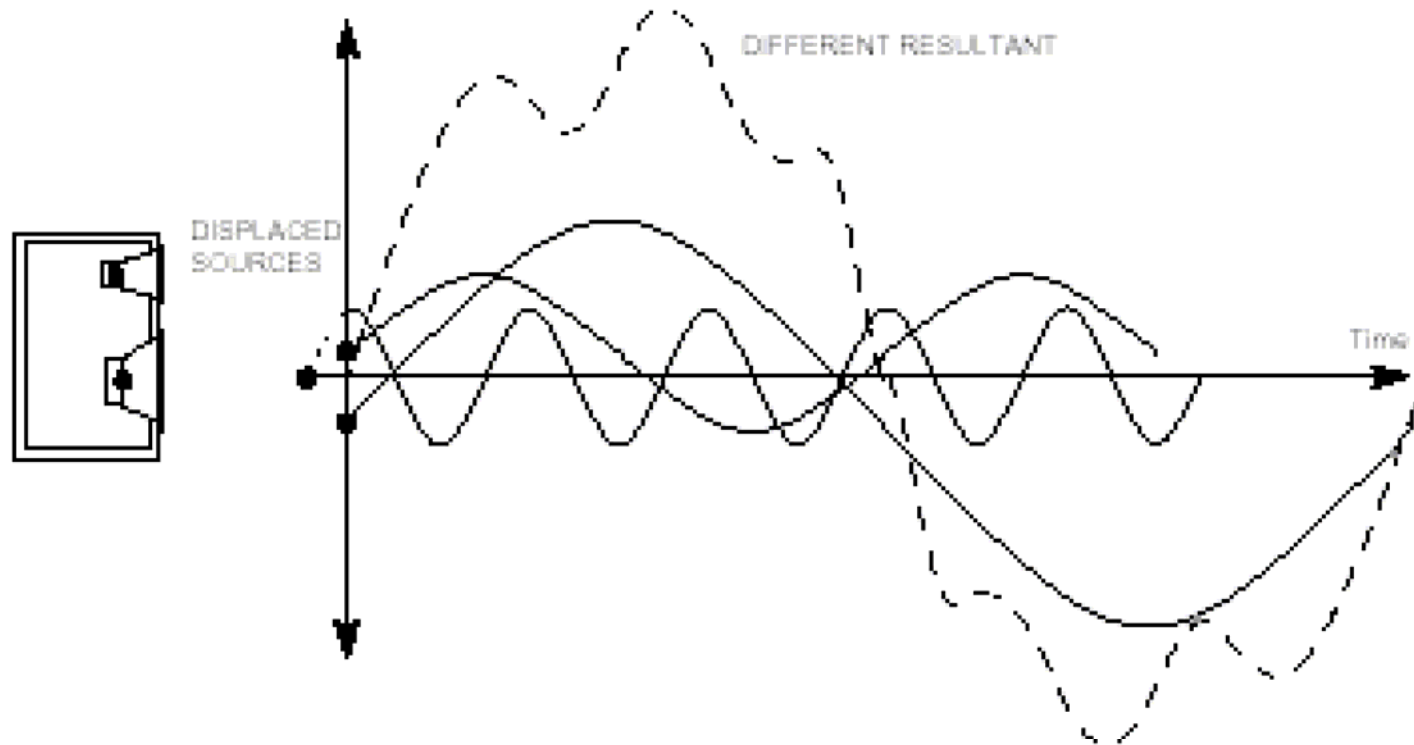
The harmonics reproduction:

We know well that sound is made of a "fundamental frequency" and its "harmonics". These frequencies can go beyond the human hearing range but contribute greatly to the sound quality. Coaxial sound reproduction protects these harmonic frequencies thanks to the one point sound source.

A coaxial loudspeaker reduces the differences in the resultant "fundamental + harmonics" in the overlap crossover zone.



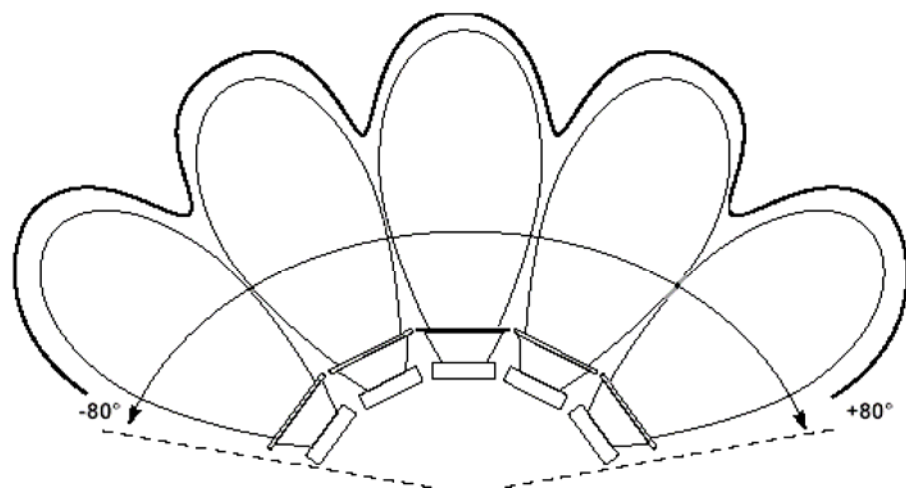
A two way loudspeaker increases the differences in the resultant "fundamental + harmonics" in the overlap crossover zone.



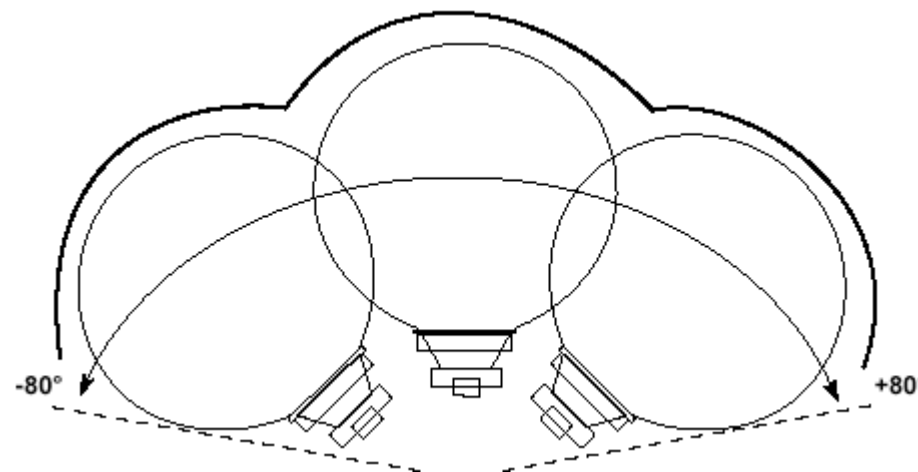
Directivity and Dimension:

It's evident that the use of a coaxial loudspeaker reduces the cabinets dimension. Moreover it is the only true solution for improving the phase performances, directivity and to simplify the crossover network. The directivity and coverage is naturally improved due to the one point source origin. This greatly helps in the problems of localization of the sound pressure and level control.

Coaxial technology creates a wave front much closer to the ideal spherical wave front. This allows us to substantially reduce the problem of coverage.



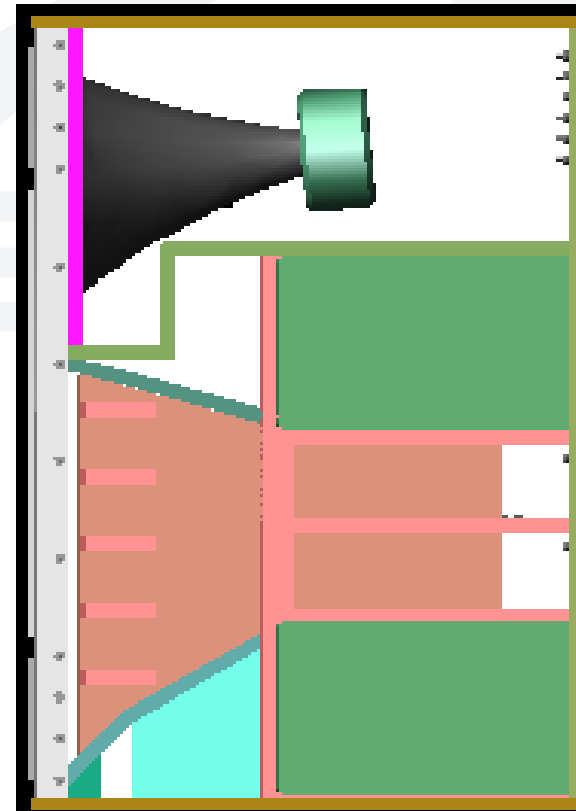
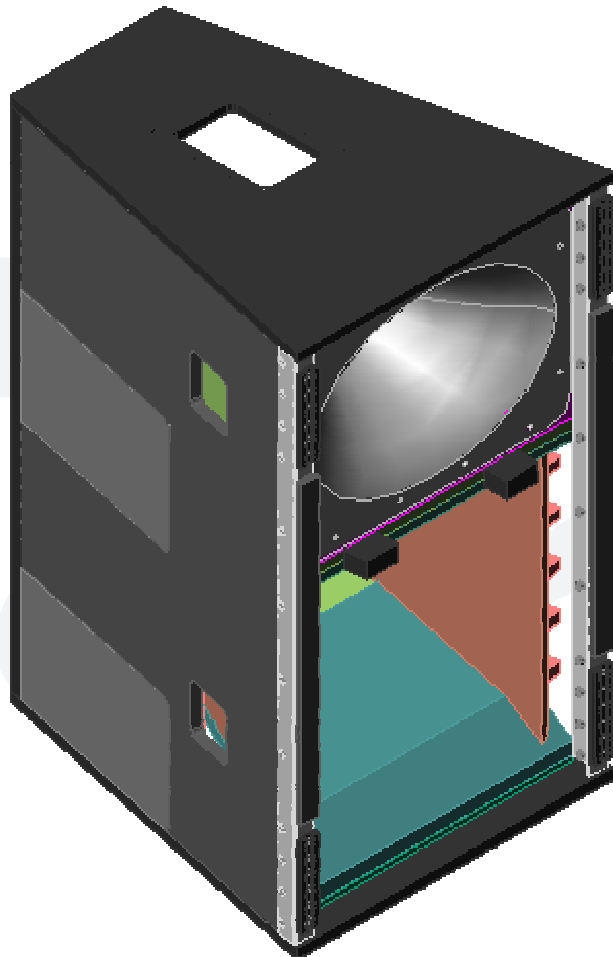
Two way:



Co-axial:

INCLINED BY 5°:

Another original point with the **EDGE 212P** satellite is that it has been internally tilted downwards by 5°:



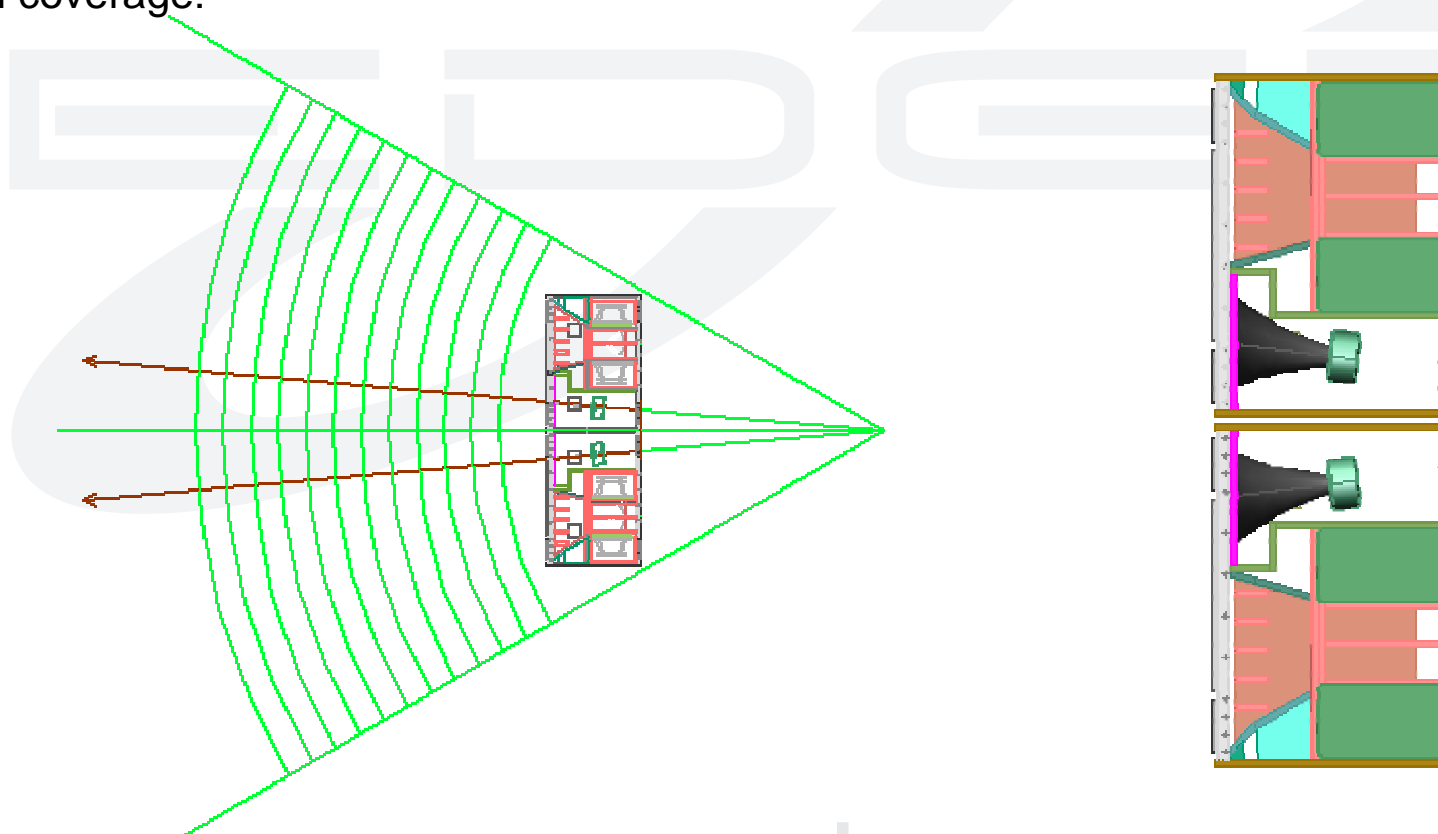
This has been done for various reasons:

Set up #1: System is placed on the stage (not flown):

In a normal situation, the acoustic origin of the speaker is pointing towards the centre of the area to be reinforced- towards the front of house mixing console.

Set up #2: System is flown:

In radiating downwards, the system does not have to be tilted towards to listening area. It's apparent acoustic origin can be aligned to another module placed upside down on top. Thus getting a wider vertical coverage:



5:EDGE- Versatility:

When planning on enlarging the **PROEL** Sound Reinforcement catalogue, it was decided to begin with a traditional cluster array. The reasons for this are very clear. **PROEL** customers range from small users to very large professional companies. As such it was seen that the traditional cluster would be the most apt.

The **EDGE** system has been designed in a 'top-down' manner. Rather than designing individual speaker cabinets and seeing how well they react when arrayed together, a large optimised system was designed and then broken down into individual component cabinets.

Each individual **EDGE 212P** cabinet has a relatively small dispersion angle (50°x 40°) which allows better reaction when arrayed and the sound to travel further.

As such, to get the true effect of the system and have good horizontal coverage, the minimum requirement is 2 x **EDGE 212P** with 2 x **EDGE 218SP** subwoofers per side.

From this point on, the size of the cluster depends only on the size of the application.

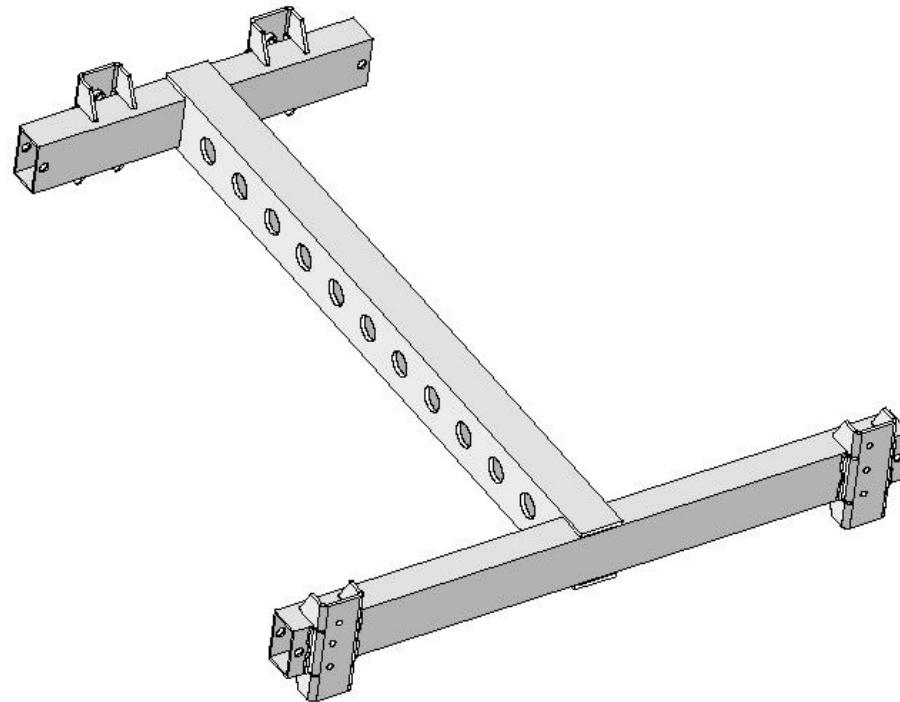
This means that a rental company with 12 systems can reinforce one large show, or up to 3 smaller ones.

This system modularity makes **EDGE** very versatile indeed.

FLYING SYSTEM:

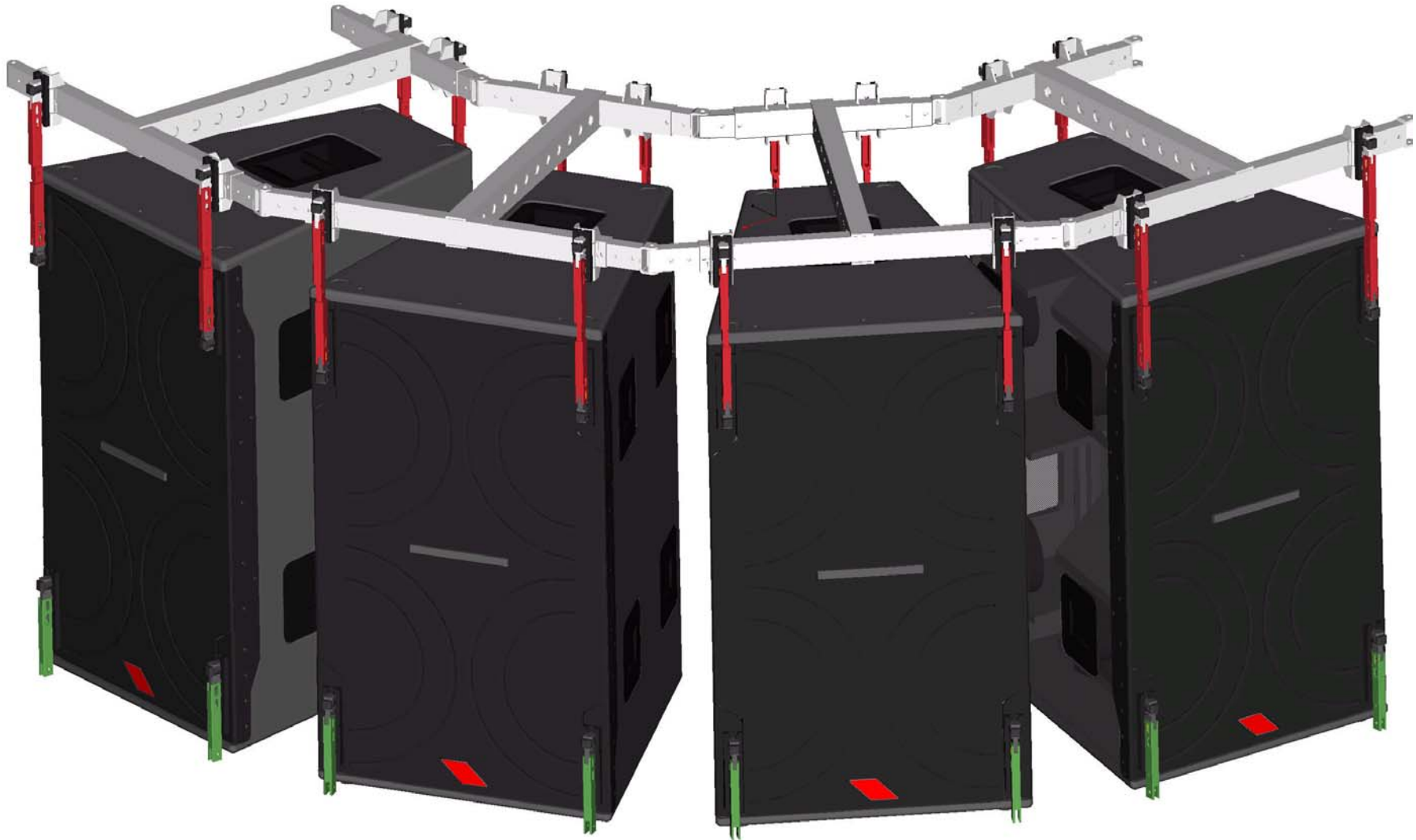
The **EDGE 212P** and **218SP** are flown using the FLY TRACK suspension system.

There is a specific flying bar for the **EDGE** series, designed by **PROEL** engineers. Each flying bar (one is required per speaker column) is capable of supporting the weight of 10 speakers with a 7:1 safety factor (which in other words means that it can theoretically hold the weight of up to 70 speakers!).

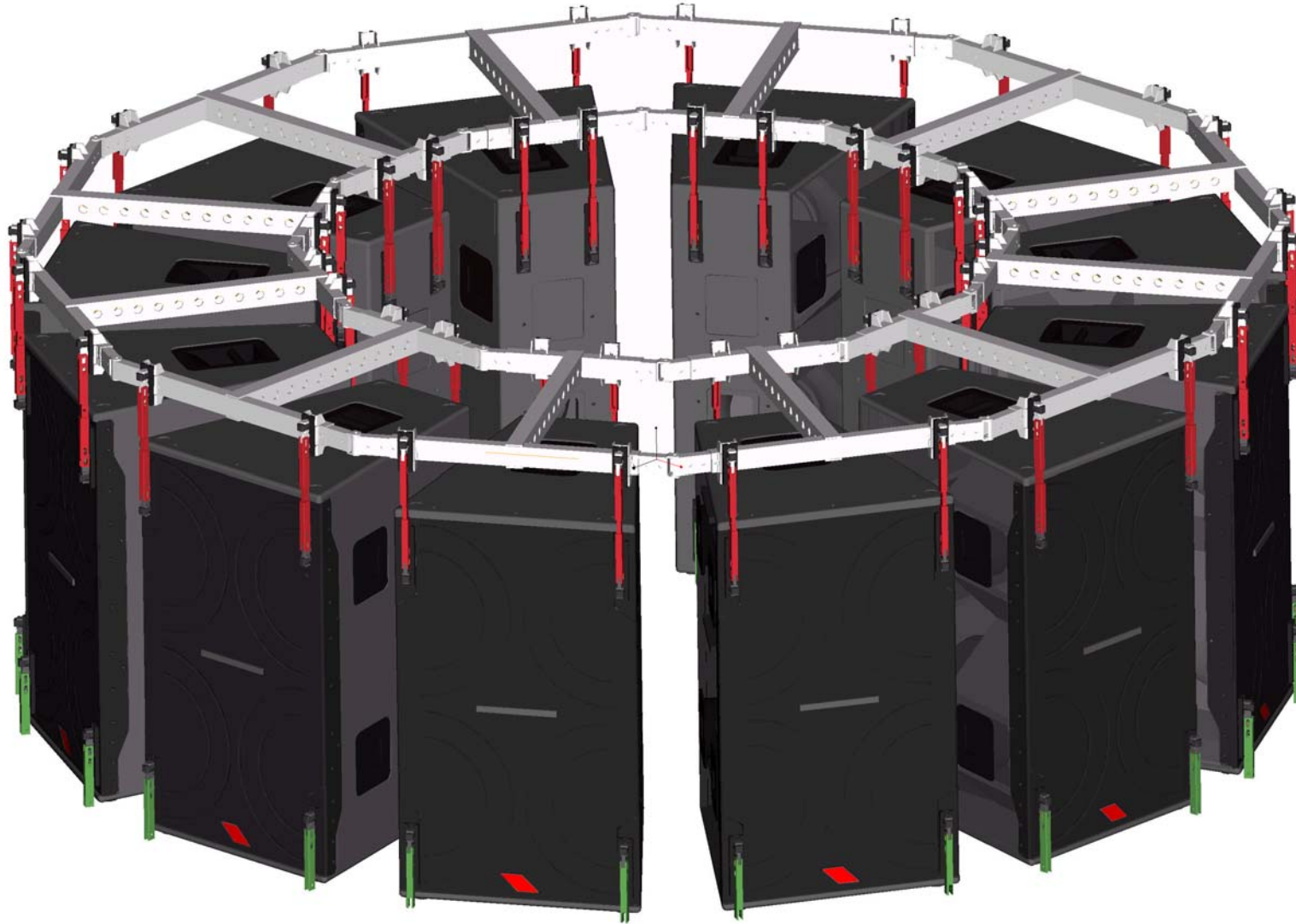


The KPTED1218 EDGE flying bar.

FLYING BAR set up examples:



Connecting together the flying bars, it is possible to array up to a full 360°:



5:MARKET POSITION- Where are we?

Before the launch of the **EDGE** series, extensive studies were carried out to ascertain the existing market place for high quality touring level PA systems.

This research, together with laboratory studies of **EDGE**, carried out by **PROEL** acoustic engineers and collaborators, has allowed us to pin-point both our closest competitors with regards to sonic and mechanical quality, SPL and power output and our potential market position with regards to the above mentioned factors and price.

These studies have found our main competitors to be:

- **MEYER SOUND** **MSL3 / MSL4 (amp)**
- **D&B** **C7**
- **ELECTROVOICE** **X-Array**
- **MARTIN AUDIO** **W8**
- **JBL** **AM6315**

What competitors communicate:

- Position: Top products for top users
- Promise: Total reliability
- Treatment: Experience
- Pay off: Class

Due to both pricing strategy and the fact that up to now the **PROEL** catalogue has not featured such a sound reinforcement system, the communication for the **EDGE** series has been decided thus:

What PROEL communicates:

- Position: Top products for **ALL** users
- Promise: Quality without compromise
- Treatment: We want to grow
- Pay off: Test us



6:EDGE- Accessibility:

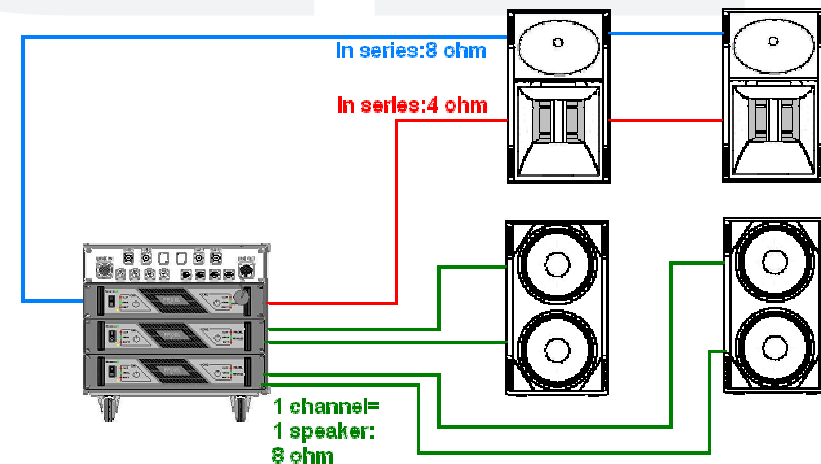
The **PROEL** catalogue is very large and very expansive. Cables, flight cases, rack panels and many more items can be customised to order. As such we are in a very good position to be able to provide complete **EDGE** audio systems.

We have worked out a series of standard set ups called 'SYSTEM POWER' which can provide clients with complete PLUG and PLAY systems.

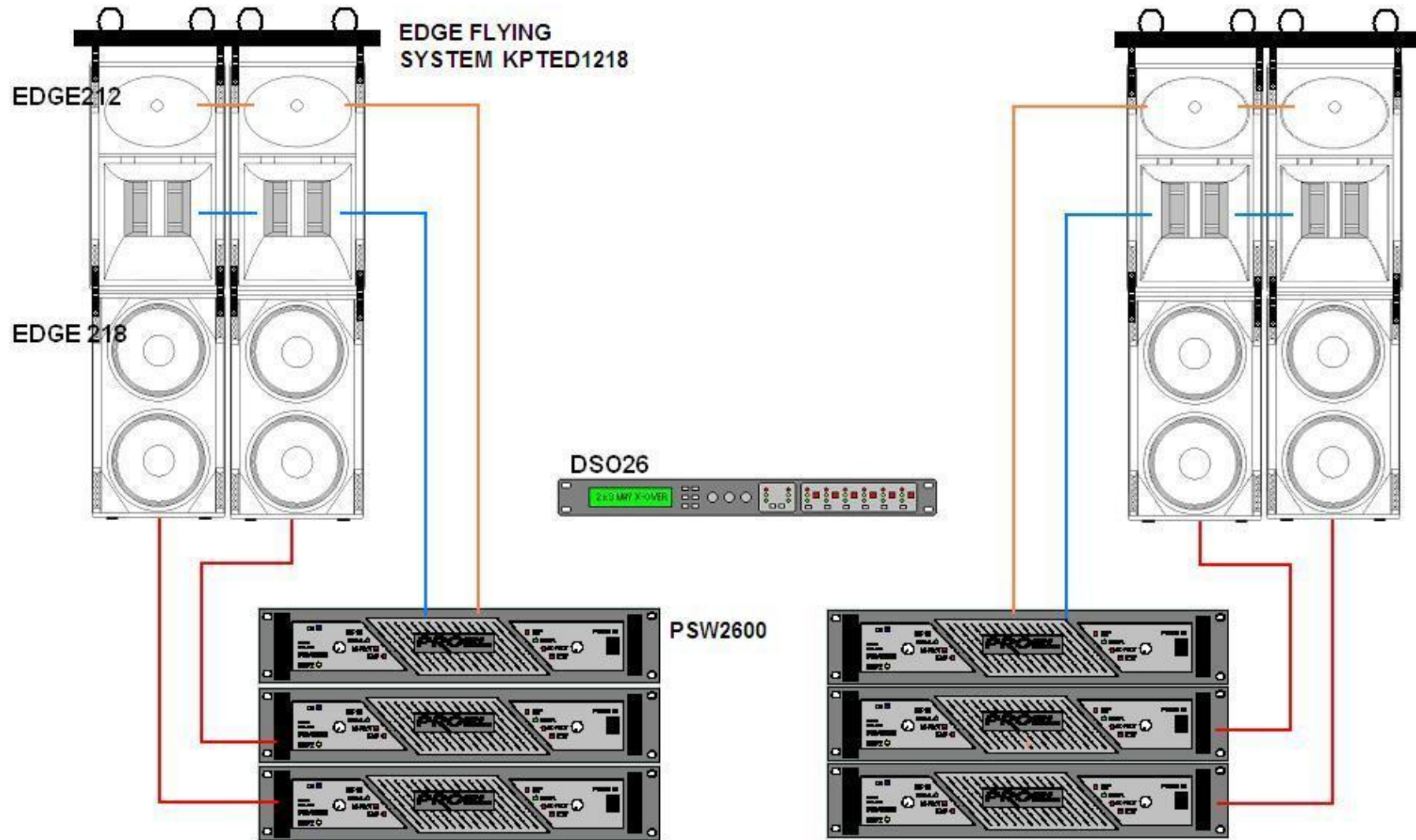
These systems can include (but are not limited to):

- **EDGE** loudspeakers
- Complete **EDGE** flying system
- **DSO26** digital system optimiser
- **PROEL PSW 2600** amplifiers (with switching technology power supply)
- High quality flight cases
- Specific audio connection patch panels
- Power input panels

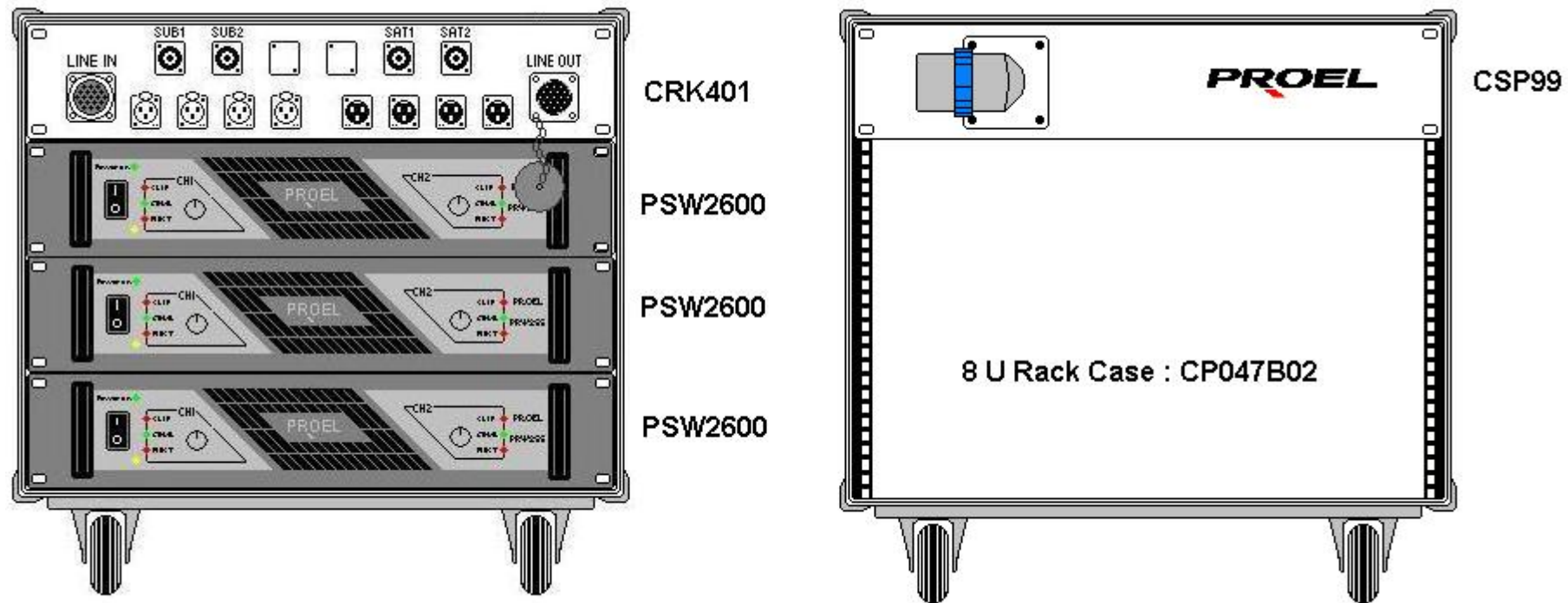
The racks are provided fully cabled and tested.



Example of a SYSTEM POWER standard set up.



Example of pre-cabled amplifier rack:



The size of the SYSTEM POWER set up depends on the clients needs. They can be personalised to almost any specifications and sizes.

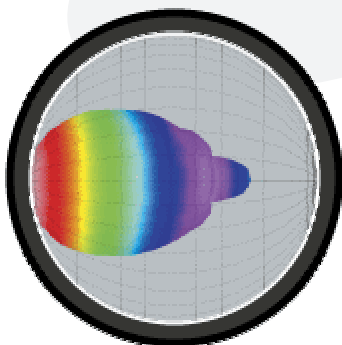
7:EDGE on EASE-Technical assistance:

EDGE technical data has been compiled to be compatible with the **EASE** software.

EASE (Enhanced Acoustic Simulators for Engineers) is a software which allows the user to see on a three dimensional model the coverage of a loudspeaker in a predefined environment. With this very useful software it is possible to design a representation of the hall or venue, insert the speakers and by turning up the (virtual) power, see the coverage and SPL the speakers will provide in that space.

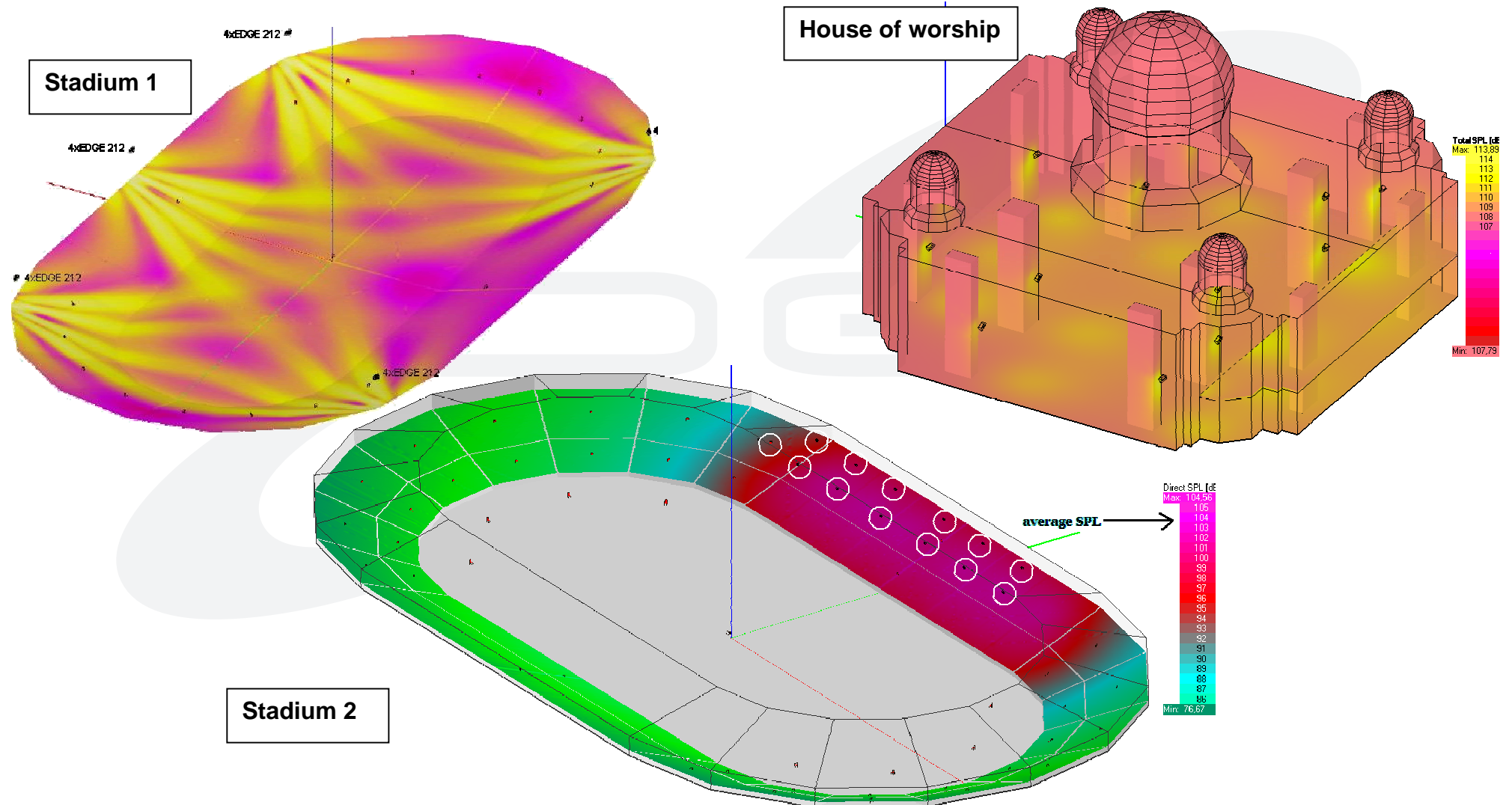
This will help us to know, among other things, the amount of systems required and where to place them to optimise coverage.

The **EASE** files for the **EDGE** system can be found on the web site at the link:
www.proelgroup.com/edge/download/radD29D9_2.pdf

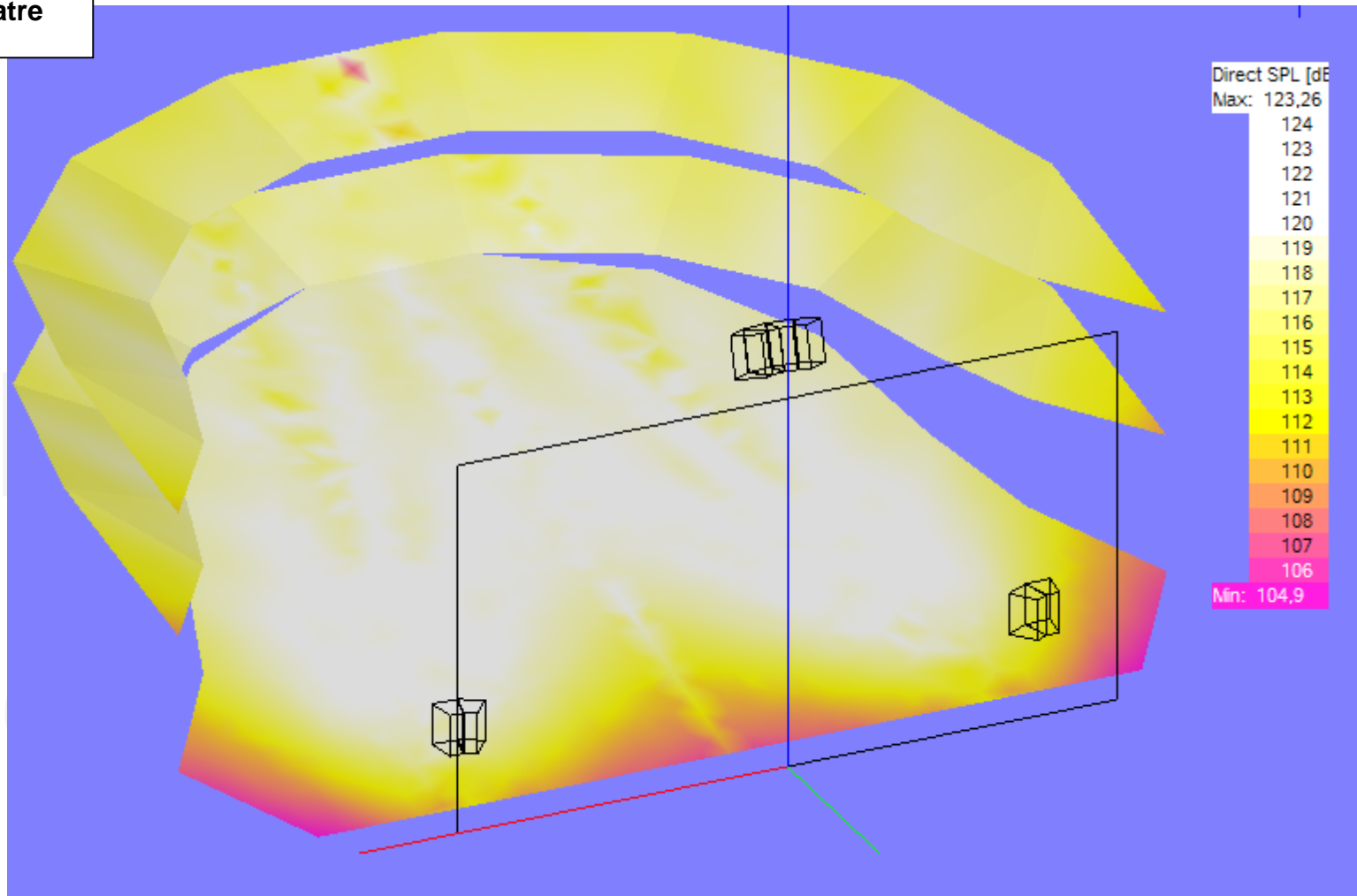


PROEL is able to give **EASE** support to clients, providing simulations of the clients applications for installation and event purposes.

Examples of EASE simulations already carried out by PROEL:



Theatre



8:EDGE- Just Listen:

In conclusion, with the EDGE system, we can offer:

- A high quality touring grade PA system
- An original and innovative
- A versatile system that can be used in many different situations
- Complete Plug and Play packages
- Personalised systems to customer specifications
- Technical assistance with projects
- System data for EASE simulations
- Technical assistance with EASE simulations
- Excellent price: quality ratio

As stated before, the strategy of the **EDGE** system is **Just Listen**.

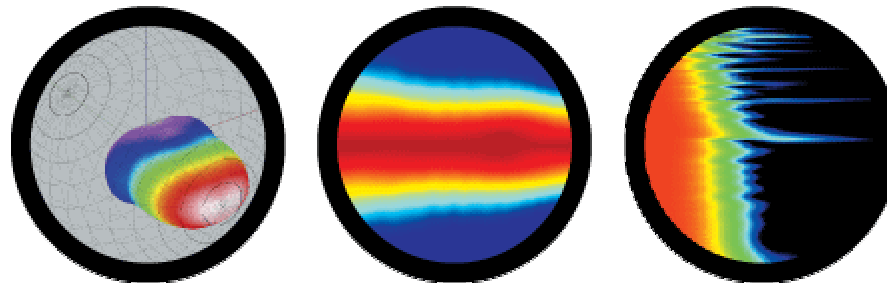
We know that **EDGE** is a high quality product, we know that **EDGE** has an excellent price: quality ratio and we know that **EDGE** sounds great.

We now invite you to share these facts with us.....

APPENDIX:

SECTION 1: EDGE TECHNICAL SPECIFICATIONS

SECTION 2: WEB LINKS



SECTION 1: EDGE TECHNICAL SPECIFICATIONS:

PROEL EDGE 212 P TOP:

SYSTEM TYPE: 3 Way, horn loaded, full range, bi-amped system
CONT. POWER: 800w + 150W AES
PROG. POWER: 1600 + 300W AES
NOM.IMPEDENCE: 8 + 16ohm
SENSITIVITY: 107dB SPL (2.83V @ 8ohm) mid
112dB SPL (4V @ 16ohm) high
RATED MAX. SPL: 139dB (mid) 137dB (high)
FREQ. RESPONSE: 80Hz - 18kHz in free space @ +/-6 dB
LOW FREQ. DEVICE: 2 x 12" woofer - 3"voice coil
HIGH FREQ. DEVICE: 2" - 2 way coaxial driver
COVERAGE DISP.ANGLE: 50° x 40° -5° vertical down tilt
CROSSOVER FREQ.: 800Hz (7kHz passive)
CONNECTORS: 2 x linked Neutrik Speakon NL4MP
ENCLOSURE: 18/24mm Birch plywood
SIZE (WxHxD): 58 x 98.5 x 68.5cm
WEIGHT: 84.5kg



FEATURES:

The woofers feature ISV (Interleaved Sandwich Voice-coil) system and die-cast aluminium basket with double ventilation, designed to improve heat dissipation and reduce "power compression" level.

Double Demodulating Rings allow better control of the excursion and a reduction of distortion.

The EDGE wave guides are both angled downwards by 5°. This allows flying arrays to be designed more rationally and helps proved better coverage in situations where flying the system is not possible.

Features a FLY-TRACK suspension system with a 7:1 safety factor. It's possible to array up to 10 boxes vertically still maintaining the 7:1 safety factor. EDGE performance characteristics have been put into the EASE system library, the data can be found on our web site.

PROEL EDGE 218SP SUBWOOFER:

SYSTEM TYPE: Direct radiation bass reflex
CONT. POWER: 800W + 800W AES
PROG. POWER: 1600W + 1600W
NOM.IMPEDENCE: 8 + 8 ohm
SENSITIVITY: 97dB SPL (2V @ 4ohm both speakers paralleled)
RATED MAX. SPL: 132dB
FREQ. RESPONSE: From 40 Hz
LOW FREQ. DEVICE: 2 x 18" woofers - 4"voice coil
CONNECTORS: 2 x linked Neutrik Speakon NL4MP
ENCLOSURE: 18 / 24mm Birch plywood
SIZE (WxHxD): 58 x 98.5 x 68.5 cm
WEIGHT: 80.1kg



FEATURES:

The woofers feature ISV (Interleaved Sandwich Voice-coil) system and die-cast aluminium basket with double ventilation, designed to improve heat dissipation and reduce "power compression" level. Double Demodulating Rings and Double Silicone Spider allow better control of the excursion and a reduction of distortion. Both the 212 and 218 and of the same dimensions. The foot-print, flying system and weight make them easy to array together. It's possible to array up to 10 boxes vertically still maintaining the 7:1 safety factor. Also available- a 21" direct radiating bass reflex Subwoofer, capable of frequencies as low as 32Hz. EDGE performance characteristics have been put into the EASE system library, the data can be found on our web site.

PROEL EDGE 121SP SUBWOOFER:

SYSTEM TYPE: Direct radiation bass reflex

CONT. POWER: 800w AES

PROG. POWER: 1600w

NOM.IMPEDENCE: 8ohm

SENSITIVITY: @1W/1m 98dB SPL (2.83V @ 8ohm)

RATED MAX. SPL: 130dB

FREQ. RESPONSE: from 32Hz

LOW FREQ. DEVICE: 21" sub woofer - 4" voice coil

CONNECTORS: 2 x Neutrik Speakon ML4MP linked

ENCLOSURE: 18/24mm birch plywood

SIZE (WxHxD): 58.4x76.3x58.4cm

WEIGHT: 64kg



FEATURES:

The only 21" direct radiating subwoofer currently available on the market, the EDGE121SP is capable of delivering very tight and controlled Very Low Frequency power.

Well built mechanical cone suspension system, double demodulation rings and over dampened box add to the control and fast transient.

Rated at 800w (AES) it can easily handle peaks of up to 6dB higher (therefore 3200w) without damage.

As with the rest of the EDGE series, it has a double silicone spider (DSS), interleaved sandwich voice coil (ISV) and a die cast aluminium basket with double ventilation to have better excursion control, improve heat dissipation, reduce distortion and reduce the "power compression" level.

PROEL EDGE 15CXP STAGE MONITOR:

SYSTEM TYPE: Coaxial 2-way vented enclosure with passive filter and bi-amp modes

CONT. POWER: 800W + 75W AES (800W full range)

PROG. POWER: 1600W + 150W

NOM.IMPEDENCE: 8 + 8 ohm (8ohm full-range)

SENSITIVITY: 99dB SPL (2.83V @ 8ohm) low

109dB SPL (2.83V @ 8ohm) high

RATED MAX. SPL: 131dB (low) 131dB (high)

FREQ. RESPONSE: 60Hz-18kHz in free space @ +/- 6dB

LOW FREQ. DEVICE: 15" woofer - 4" voice coil

HIGH FREQ. DEVICE: 1.5" compression driver

COVERAGE DISP.ANGLE: 65° x 65° averaged @ 65dB

CROSSOVER FREQ.: 1450Hz

CONNECTORS: 2 x linked Neutrik Speakon NL4MP

ENCLOSURE: 18/24 mm Birch plywood

MONITOR TAPER: 42°

SIZE (WxHxD): 58 x 39.5 x 62cm

WEIGHT: 38kg

FLYING POINTS: 4 x M10 on the sides / pole mounting



FEATURES:

The woofers feature ISV (Interleaved Sandwich Voice-coil) system and die-cast aluminium basket with double ventilation, designed to improve heat dissipation and reduce "power compression" level.

Double Silicone Spider and copper ring give better control of the excursion and a reduction of distortion.

The internal cavity of the woofer is optimised for directivity control.

The high frequency 1.5" compression driver contains Ferro fluid and features a titanium diaphragm.

Discreet low profile speaker box. Reduced size due to the co-axial speaker design. High power output.

Has a dedicated flight case, capable of transporting two monitors.

PROEL EDGE12CXP STAGE MONITOR:

SYSTEM TYPE: Coaxial 2-way vented enclosure with passive filter and bi-amp modes

CONT. POWER: 450W + 75W AES (800W full range)

PROG. POWER: 900W + 150W

NOM.IMPEDENCE: 8 + 8 ohm (8ohm full-range)

SENSITIVITY: 98dB SPL (2.83V @ 8ohm)

RATED MAX. SPL: 127dB

FREQ. RESPONSE: 60Hz-18kHz in free space @ +/- 6dB

LOW FREQ. DEVICE: 12" woofer - 3" voice coil

HIGH FREQ. DEVICE: 1.5" compression driver

COVERAGE DISP.ANGLE: 65° x 65° averaged @ 65dB

CONNECTORS: 2 x linked Neutrik Speakon NL4MP

ENCLOSURE: 18/24 mm Birch plywood

MONITOR TAPER: 48°

SIZE (WxHxD): 43 x 39.5 x 62 cm

WEIGHT: 25kg

FLYING POINTS: 4 x M10 on the sides / pole mounting



FEATURES:

The woofers feature ISV (Interleaved Sandwich Voice-coil) system and die-cast aluminium basket with double ventilation, designed to improve heat dissipation and reduce "power compression" level.

Double Silicone Spider and copper ring give better control of the excursion and a reduction of distortion.

The internal cavity of the woofer is optimised for directivity control.

The high frequency 1.5" compression driver contains Ferro fluid and features a titanium diaphragm.

Discreet low profile speaker box. Reduced size due to the co-axial speaker design. High power output.

PROEL EDGE 8CXP COAXIAL LOUDSPEAKER:

SYSTEM TYPE: Coaxial 2 Way vented enclosure
CONT. POWER: 225w AES
PROG. POWER: 450w
NOM.IMPEDENCE: 8ohm
SENSITIVITY: 95dB SPL (2.83V @ 8ohm)
RATED MAX. SPL: 121dB
FREQ. RESPONSE: 63Hz - 20kHz in free space
LOW FREQ. DEVICE: 8" woofer - 2" voice coil
HIGH FREQ. DEVICE: 1.5"compression driver
COVERAGE DISP.ANGLE 60° x 60°
CROSSOVER FREQ.: 2500Hz
CONNECTORS: 2 x SPK4MP linked
ENCLOSURE: 15mm birch plywood
MONITOR TAPER: 45°
SIZE (WxHxD): 26x32x28cm
WEIGHT: 10kg
FLYING POINTS: 4 x M10/ pole mounting



FEATURES:

The 8" woofer features an ISV (Interleaved Sandwich Coil) and a die cast basket with double ventilation to ensure maximum heat dispersion and reduce power compression level.

The 1" compression driver contains Ferro fluid with also helps heat distribution and increases power handling and damping factor whilst decreasing distortion. The voice coil features flat aluminium wires ensuring low distortion, high efficiency and optimal power grade.

Contains a 12dB/octive passive crossover with a PTC electric protection.

Spherical 60° x 60° coverage dispersion angle allows the speaker box to be positioned either vertically or horizontally with the same coverage.

Dispersion and shape allows the 8CXP to be used as a wedge monitor.

PROEL EDGE 25P LOUDSPEAKER:

SYSTEM TYPE: 2 Way vented-full range

CONT. POWER: 100W AES

PROG. POWER: 200W

NOM.IMPEDENCE: 160ohm

SENSITIVITY: 93dB SPL (2.83V @ 8ohm)

RATED MAX. SPL: 116dB

FREQ. RESPONSE: 110Hz - 20kHz in free space

LOW FREQ. DEVICE: 2 x 5.25" woofers

HIGH FREQ. DEVICE: dome tweeter with SWGH (Spherical Wave Guide Horn)

COVERAGE DISP.ANGLE 100° x 80° averaged

CROSSOVER FREQ.: 2500Hz

CONNECTORS: 2 x Neutrik Speakon NL4MP linked

ENCLOSURE: 15mm birch plywood

MONITOR TAPER: 20°

SIZE (WxHxD): 16.5 x 44.5 x 17 cm

WEIGHT: 7 kg

FLYING POINTS: 2 x M8- top/bottom 1 x M10- rear



FEATURES:

Woofers and dome tweeter in a WTW configuration,

Cabinet asymmetrical trapezoid for array configurations,

High efficiency with a very natural sound,

Wide dispersion angle and homogenous coverage,

16 ohm impedance facilitates parallel configuration,

Very low profile cabinet- developed for near field applications, can be used for fixed installations,

PROEL DSO26 DIGITAL PROCESSOR:

INPUT: 2 balanced inputs-10kOhm

OUTPUT: 6 balanced outputs-600Ohm

CMRR: >65dB 50Hz-10kHz

AD/DA CONVERT: 25 bit

INT.PROCESSING: 40 bit double precision

DYNAMIC RANGE: >100dB 20Hz-20kHz unweighted

DISTORTION: <0.02% @1kHz, +18dBm

PARAMETRIC EQ: 30 filters(5 filters per output)

CROSSOVER FILTERS: 1 HPF/1LPF per output

HPF FREQUENCY: 10Hz-16kHz (1/36oct.steps)

LPF FREQUENCY: 60Hz-22kHz (1/38oct.steps)

MAX. OUTPUT: +20dBm into 600ohm

FREQ. RESPONSE: 20Hz-20kHz (+/-0.5dB)

OUTPUT GAIN ADJUST: +15dB to -40dB (0.1dB steps)

LIMITER THRESHOLD: +22dBu to -10dBu

LIMITER ATTACK TIME: 0.3 to 90ms or automatic ATC

LIMITER RELEASE TIME: 2,4,8,16,32 times the attack time or ATC

MAX. DELAY: 650ms (2.62us steps)

DISPLAY: LED bars and backlit LCD

CONNECTORS: XLR (in/outputs)

POWER COMSUMPT.: <30W

DIMENSIONS (WxHxD): 48.2x4.4x30cm



FEATURES:

The DSO26 Digital Processor is a high quality processor featuring a 40 bit optimised double precision processing unit and high quality 24 bit AD/DA converters.

These features provide excellent sonic quality and a dynamic range in excess of 110dB with very low residual noise.

It contains a complete set of pre-loaded programs, set up using proprietary measurement and averaging techniques.

These programs have been made to optimise the EDGE loudspeakers in varied configurations.

Additional programs are available for other PROEL loudspeaker systems and there are free memories to store further user programs.

System updating is possible via RS232 port. RS232 (software updates)

Each output features 12,18 or 24 dB/oct variable high and low pass filters with a choice of Butterworth, Bessel or Link-Riler responses.

30 Full frequency-span parametric eq filters (5 per output). Any EQ filter can be set as High or Low shelving mode.

PROEL PSW2600 POWER AMPLIFIER:

OUTPUT POWER:(1kHz) 800w + 800w @ 8 Ohm

(THD<1%) 1250w + 1250w @ 4 Ohm

2200w Bridge @ 8ohm

FREQUENCY RESPONSE 20Hz-20kHz (+/- 0.5dB)

INPUT SENSITIVITY: Constant level:0dB

Constant gain:40x(32dBu)

INPUT IMPEDENCE: 12 kOhm (balanced), 16 Ohm (unbalanced)

DAMPING FACTOR: >500 @ 8 Ohm

S/N RATIO (unweighted): 107dB

CONNECTORS: Input: XLR

Output: SPEAKON SPK4MP/ Binding posts

LEVEL METERS: Clip, Protect, Signal, Bridge, Power(LED)

LOAD PROTECTION: DC, Soft start, Short circuit

AMP. PROTECTION: Thermal (heat sink temp.>= 90°C)

COOLING: 2 x Variable speed fans

DIMENSIONS (WxHxD): 48.3 x 88.3 x 42.5cm



FEATURES: WEIGHT: 9.5kg

High performance class H linear power amplifier.

Low frequency response, even for the most dynamic signals.

Power level regulated under any voltage value, therefore high level performance under any condition.

Can be supplied by voltage values inferior to nominal- possible to use long voltage lines without compromising power performance.

Rugged design layout for touring applications.

2 unit size and efficient cooling characteristics allow for compact installation.

Switching technology reduces weight allowing easier transportation and installation.

Excellent weight to power ratio.

SECTION 2: WEB LINKS:

PROEL SpA HOMEPAGE: www.proelgroup.com

PROEL EDGE SERIES HOMEPAGE: www.proelgroup.com/edge/en/

PROEL EDGE CABINET VIBRATION STUDY: www.proelgroup.com/edge/download/radD29D9_2.pdf

PROEL EDGE SERIES EASE FILE DOWNLOADS: www.proelgroup.com/edge/downloads.htm

LISA DESIGN WORKSHOP: www.lisagroup.com

EASE PROGRAM INFORMATION: www.renkus-heinz.com

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EDGE

Commercial and Technical Product Guide