

The essence  
of Sound





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# AXIOM

## THE ESSENCE OF SOUND

AXIOM represents the culmination of an extensive development project that addresses the specific requirements of concert touring, fixed installation, and portable sound reinforcement professionals around the world.

Combining state-of-the-art proprietary Italian-made transducers, advanced electronics, and modern digital technologies in a range of high performance loudspeaker products designed and manufactured entirely in Italy, AXIOM utilises the most efficient production and test processes available to achieve incomparable quality and ultimate reliability.

The AXIOM product range provides a dedicated solution for every conceivable sound reinforcement application: as a main front of house PA system either indoor or outdoor; for stage monitoring and side fills; in fixed installations ranging from sports facilities to theatres, houses of worship, live music venues, nightclubs and bars; and for a myriad of corporate and portable applications.

AXIOM products are proudly supported by a specialised technical support network in more than 120 countries worldwide.







PROEL is a leader in the design, manufacture and distribution of audio, video and lighting equipment for the world of entertainment and live music events, and for fixed installations.

Established in 1991 by Fabrizio Sorbi in Sant'Omero, Italy, the company has witnessed steady development and robust growth. Today PROEL employs more than 120 people at its state-of-the-art modern factory, and distributes its products in over 120 countries worldwide.

The creation, in 1997, of the PROEL research and development team marked the beginning of a long and successful journey in the design and marketing of high quality sound reinforcement products. In 2002, after bringing on board technicians and professionals with years of experience in designing sound systems and their use in live applications, the R&D team embarked on the research of higher performance intelligent solutions for a global sound reinforcement market.

PROEL quickly assembled a group of specialists with expertise not only in academic and laboratory disciplines, but also behind mixing desks and on concert stages – and had created a series of successful point source and line array loudspeaker systems rooted in technical innovation and originality.

In 2014 a specialist design team was assigned to the creation of a new AXIOM brand, with the specific aim of developing a comprehensive loudspeaker product range that fulfils the expectations of customers looking for top performance. In addition to this, a cooperation with highly specialised consultants in Loudspeaker Engineering as **Mario Di Cola** and his team at Audio Labs Systems was set. The team embarked on the challenge of crystallising the requirements of professional users and translating these into innovative solutions that provide excellent sound quality, easy of use, versatility and reliability.

Today the AXIOM team – made up of loudspeaker system designers, analogue electronics specialists, digital systems practitioners, integration experts and live sound engineers – is creating the most advanced, state-of-the-art technologies: using powerful ultra-light transducers, efficient class-D amplifiers, integrated digital signal processors, high-end analogue electronics and convenient, efficient wiring and suspension systems.





THE JOURNEY  
STARTS HERE



# DESIGNED AND ENGINEERED INITALY



Skilful design and the application of appropriate technology in combination make a great product, working together for the most optimal form and function to be achieved. AXIOM loudspeaker systems are uniquely designed and engineered entirely in Italy by the AXIOM R&D team and manufactured at the new PROEL production hub where earlier a big Japanese corporation was producing high technology musical instruments and engaging in acoustics research. This new facility provides the AXIOM brand with modern production processes, high quality standards, huge logistics spaces and an efficient layout, staffed by highly qualified design engineers, digital electronics experts, and technicians.

The PROEL lab enables the R&D team to seek out new technological solutions through its strong links with local and national academic institutions, to constantly optimise products in the current portfolio, and to design and bring to market products tailored to the needs of professional users that make a lasting impression on the sound reinforcement market.

The AXIOM range was developed using the most advanced 2D and 3D modeling software, renowned for the ability to visualize and generate complex waveguides and for its accuracy in designing with many different materials. These processes have been combined with high end industrial design to create refined loudspeaker systems with real world applications.

We have developed sophisticated analytical and measurement routines that evaluate every minute aspect of the loudspeaker components' acoustical, mechanical, and thermal behaviour to ensure that predictably repeatable performance and effective manufacturability can be maintained within tight tolerance limits.

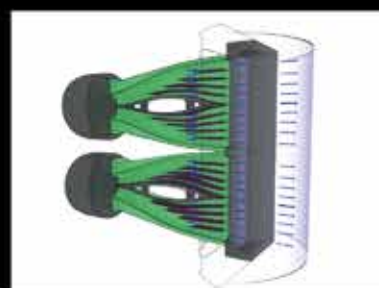
Development of the acoustic domain is of course only part of the story. Digital electronics has literally transformed the way that professional sound systems can perform in widely variable venue conditions, not to mention the convenience of packaging lightweight amplifiers together with digital signal processing modules within the loudspeakers themselves. The AXIOM R&D team has attached great importance to the field of digital electronics and has developed proprietary DSP platforms for speaker processing and audio signal distribution that are amongst the highest quality available.



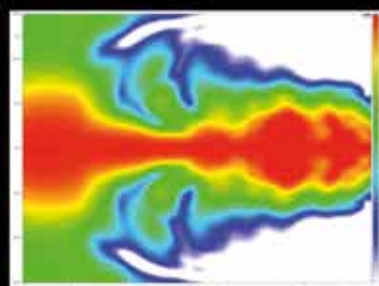
State-of-the-art analogue and digital electronic design



Advanced 3D modelling and mechanical engineering



Design and development of innovative acoustic solutions



Sophisticated acoustic analysis and simulation





PRONET



LOUDSPEAKER CONTROL SOFTWARE

# PRONET AX ULTIMATE CONTROL

PRONET AX is the latest iteration of the widely-used PRONET remote control software, developed by PROEL's design engineers to control network-enabled AXIOM powered loudspeaker systems equipped with the CORE DSP platform.

PRONET AX offers a totally redesigned user interface with improved object identification and management – thanks to color-coded items, intuitive icons and panels, desktop grid, and docking Editor Panel.

Three different operating modes are provided: SETUP, EDIT, and LIVE; these can be chosen depending on whether systems are to be set up for the first time, units are to be edited individually, or operated under live conditions; and on the operations to be performed on the loudspeaker system.

The interface allows different choices of information or features to be displayed or selected on the unit's control panels (for example Find / Name / Preset / Signal), and provides a method of fast Group assignment. The software allows the easy creation of arrays of different models of AXIOM loudspeakers, and global control of volume, mute and EQ functions for each array.

The interface allows different choices of information or features to be displayed or selected on the unit's control panels (for example Find / Name / Preset / Signal), and provides a method of fast Group assignment. The software allows the easy creation of arrays of different models of AXIOM loudspeakers, and global control of volume, mute and EQ functions for each array.

PRONET AX features a desktop-based operating mode known as SYNC DOWN, which provides the possibility to edit systems off-line and download parameters to the connected units when going on-line. The possibility to read the parameters from the connected system is maintained with the READ UP mode.

Snapshots of the entire system can be loaded or saved, including not only a specific unit's position on the desktop but also all of system's parameters.



# AX LINE ARRAYS

## KEY FEATURES

- High output Line Array elements
- Compact size, very good output-to-weight ratio
- High quality, low compression, low distortion HF drivers with titanium diaphragms and new suspension design
- Very stable horizontal coverage
- Transmission Line back loading for clean mid-bass reproduction and natural cardioid behaviour
- Natural sound Transmission Line HF projection wave-forming device
- 96KHz / 40 bit floating point CORE processing with PRONET AX remote control
- Digitally controlled Class D amplifier module with SMPS

AX Vertical Line Array systems are designed for indoor and outdoor sound reinforcement applications where flexibility and ease of use are a primary consideration. They combine superior sound quality with leading-edge processing and digital amplification in practical road-ready packages. Made entirely in Italy using world-renowned Italian transducers and state-of-the-art manufacturing techniques, the AX series has been engineered for consistently reliable performance without compromise.







# AX LINE ARRAYS





AXIOM AX series line arrays provide high output from compact enclosures easily adaptable to a wide range of concert touring, portable, and fixed sound reinforcement applications.

High frequencies are reproduced by low distortion compression drivers (two are used in the AX2010, and a single unit in the AX2065), equipped with lightweight titanium diaphragms with a special suspension designed to deliver very natural sound quality. They are loaded by a transmission line wave-forming waveguide to achieve better high frequency projection over large distances.

The mechanical design of the AX line arrays places the high frequency waveguide in the centre of the cabinet between the two low frequency drivers, known as a WTW driver configuration. This symmetrical arrangement, together with a relatively low crossover frequency and the physical separation of the woofers, avoids the potential effects of beaming around the crossover frequency.

The custom designed Italian made low frequency transducers are equipped with very lightweight cones and rubber suspensions to extend their low frequency response. Diaphragm weight is further reduced by the use of aluminium coils rather than copper, and this resultant reduction in mass is responsible for the fast reproduction of mid and mid-bass musical passages. Thermal capacity is also improved, and consequently the overall power compression as well.

The woofers are back-loaded by a short transmission line that minimises any box resonances and eliminates the 'boxy' mid-bass sound commonly found in traditional bass-reflex enclosures.

Rigging hardware is fully integrated into the AX series line array cabinets, and the rigging pins are captive, requiring no external parts other than the custom designed flybars to quickly and easily fly a loudspeaker array.

Both the medium scale and compact powered AXIOM line arrays feature a 2000 watt digitally controlled Class D amplifier module with SMPS (switch mode power supply). The power supply employs a variable switching frequency that varies with input level to deliver audio performance comparable to audiophile Class AB designs, but with vastly improved efficiency (better than 90%) as well as much lower weight and reduced size.

System processing for active AXIOM line arrays is based on the CORE DSP platform developed by PROEL's R&D laboratories, using one of the most advanced SHARC DSP chips available for audio applications. 40-bit, 96kHz floating point resolution and top quality A-D converters ensure perfect signal integrity, dynamic range in excess of 110 dB, and superior sonic performance.

Powered AXIOM line arrays can be conveniently remote controlled by PRONET AX control software running on a Windows® PC. The free software, which works on the very stable and reliable CANBUS protocol, provides an intuitive user interface for remote control of the whole system, offering access to equalisation, multiple delays, driver protection, and overall amplifier status monitoring.



# AX12C

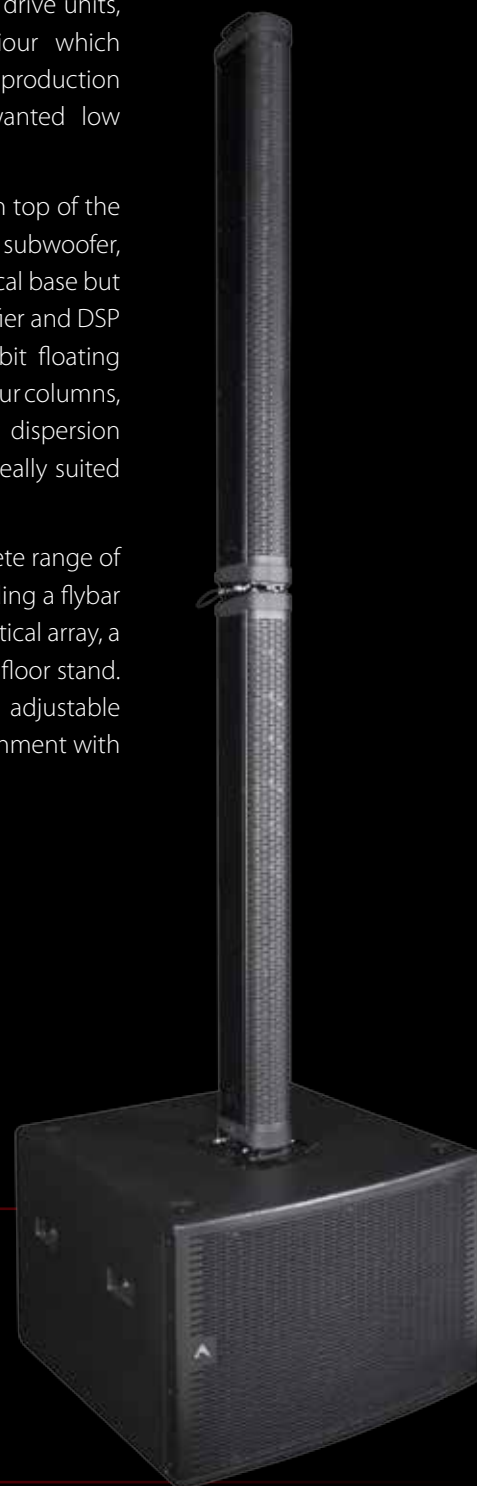
## High Output Column Array

The AX12C is a high power passive column array loudspeaker designed for a variety of mobile and permanently installed sound reinforcement applications requiring high output from a very discreet and transportable physical package. It consists of twelve identical 3.5" neodymium cone transducers arranged in a vertical line array, each loaded by a Front Diffraction Waveguide that contributes towards wide horizontal dispersion.

The mechanical design of the extruded aluminium housing provides transmission line back-loading for the drive units, resulting in natural cardioid behaviour which promotes clean, accurate mid-bass reproduction and a significant reduction in unwanted low frequency energy behind the array.

The AX12C can be simply mounted on top of the complementary SW2100A powered subwoofer, which provides not only a stable physical base but also houses a 4000 watt Class D amplifier and DSP module with proprietary 96kHz / 40bit floating point CORE DSP that can power up to four columns, thereby making up a powerful, wide dispersion sound reinforcement system that is ideally suited to live band or corporate applications.

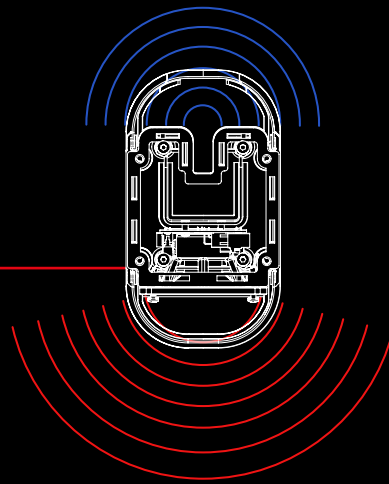
For permanently installations a complete range of mounting hardware is available, including a flybar for suspending up to four units in a vertical array, a wall bracket for up to two units, and a floor stand. Individual columns are supplied with adjustable brackets that enable mechanical attachment with 0° or 2° between units.



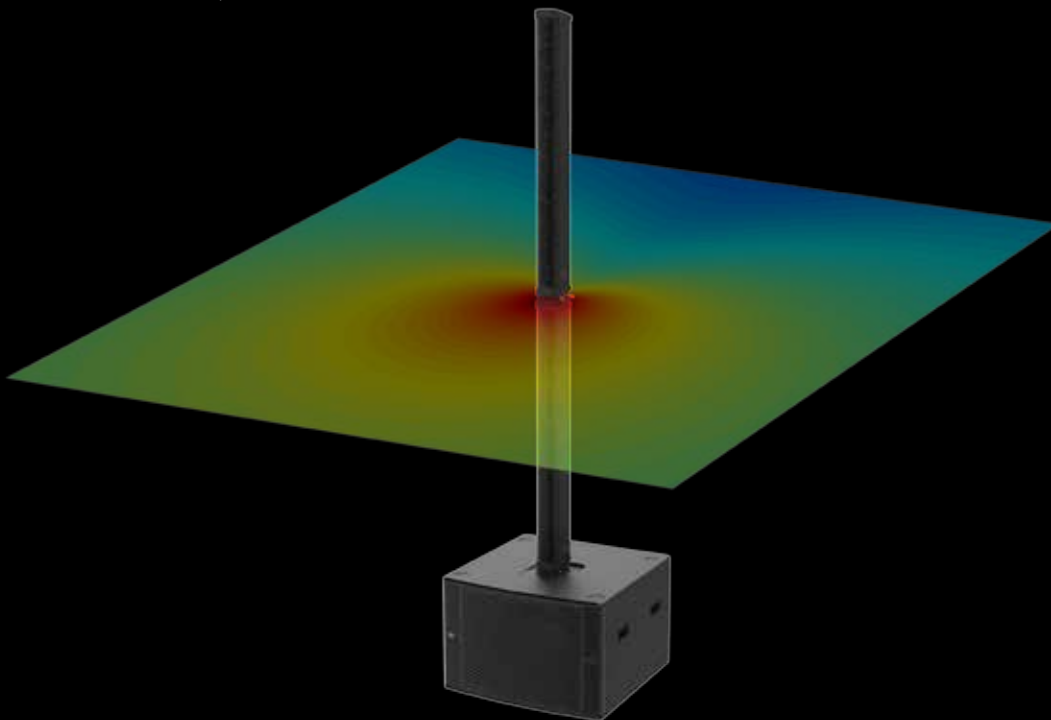


The transmission line back-loading technique fundamental to the AX12C and used in other Axiom line array products solves a problem that can occur in many sound reinforcement situations - a perception of excessive bass and mid-bass frequencies behind the PA, and also on the stage.

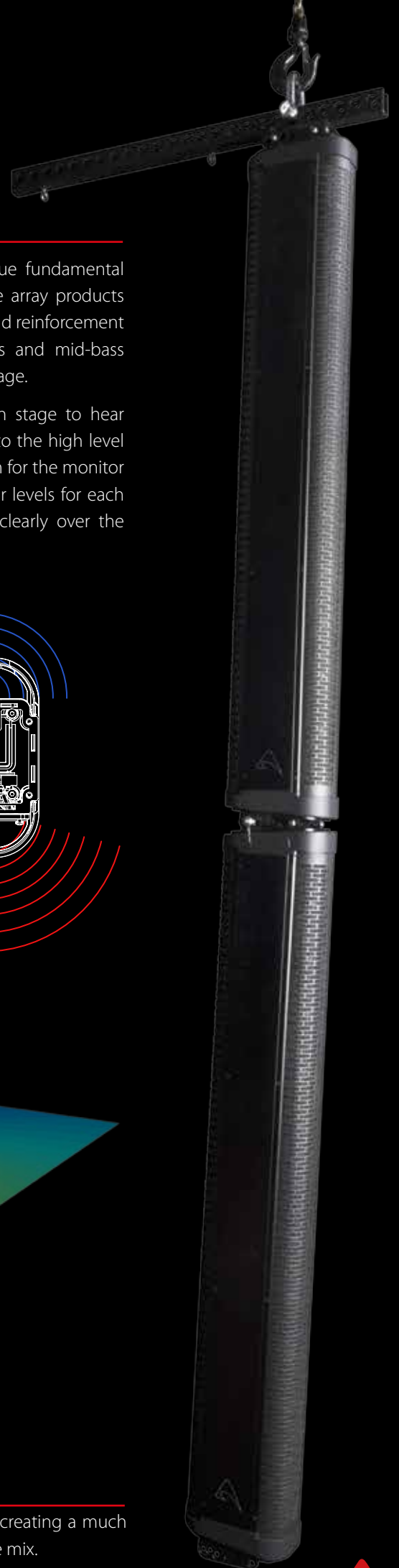
This can make it difficult for performers on stage to hear themselves or their instruments clearly due to the high level of background noise. It can also be a problem for the monitor engineer, who may need to increase monitor levels for each musician to be able to hear his own mix clearly over the ambient low frequency noise.



By directing radiation from the back of the speaker cones out of phase with the radiation from the front of the speaker cones, transmission line back-loading effectively cancels some of the low frequency energy behind the speaker array, maintaining an equivalent balance between the PA and monitors, but with better headroom.



The result is a useful reduction in low range frequencies at the rear of the array – creating a much cleaner soundscape on the stage, and better separation between instruments in the mix.







## AX2010P

### Dual 10" Passive Vertical Line Array

The AX2010P is a passive vertical line array element providing superior sound quality and effortless portability, designed for general purpose live sound reinforcement applications where a range of audience spaces can be addressed with only one type of enclosure. The loudspeaker is based around two high performance 10" woofers with lightweight cones and aluminium voice coils to ensure fast response in the bass and mid frequencies. These are loaded by a hybrid transmission line that eliminates the 'boxy' sounding mid-bass common with conventional bass-reflex designs. Two 1.4" high frequency compression drivers, loaded by transmission line wave-forming waveguides, deliver detailed and natural high frequencies with excellent projection capabilities. The birch plywood cabinet includes integrated rigging hardware designed for both portable applications and fixed installations.

## AX2010A

### Dual 10" Powered Vertical Line Array

The AX2010A powered vertical line array raises ease of operation to a new level. Dispensing with separate amplifier racks and associated bulky cabling, the AX2010A is a self-contained high quality audio source containing two 10" woofers and two 1.4" HF compression drivers powered by a new generation 2000 watt DA series Class D digital amplifier with digitally-controlled SMPS, providing superior sound definition at all audio frequencies and exceptional dynamics. Optimised performance is ensured by the 40-bit, 96kHz CORE DSP that is implemented across all AXIOM range powered products, and controlled via a PC by the intuitive PRONET AX control and monitoring software developed by the PROEL R&D team. The integrated rigging hardware and transport accessories make the assembly of flown clusters an easy task.





## AX2065P

### Dual 6.5" Passive Vertical Line Array

The AX2065P is a compact passive vertical line array element providing superior sound quality and effortless portability, designed for live sound reinforcement in small to medium audience spaces, for example for corporate events, broadcast studios, and fashion shows, where height limitations may be a constraining factor. It is also ideal for use as flown or ground stacked stage side fill applications as part of a larger system, and as a stage front fill loudspeaker. The two proprietary 6.5" woofers use hybrid transmission line loading to reduce box resonance and ensure clarity in the mid-bass frequencies, while the highs are handled by a 1.4" low-distortion compression driver loaded by transmission line wave-forming waveguide. The birch plywood cabinet includes integrated rigging hardware designed for both portable rental applications and fixed installations.

## AX2065A

### Dual 6.5" Powered Vertical Array

The identically-sized AX2065A dual 6.5" powered line array element combines superior sound quality with a higher level of convenience, and is designed for live sound reinforcement of small to medium audience spaces. It is powered by a 2000 watt DA series digital amplifier, a new generation of Class D power amplifier with digitally-controlled SMPS, providing superior sound definition at all audio frequencies and exceptional dynamics. The power module is not only extremely compact and lightweight, it is also capable of powering an additional passive AX2065P loudspeaker, making very efficient use of mains power. Optimised performance is ensured by the 40-bit, 96kHz CORE DSP that is implemented across all AXIOM range products, and controlled via a PC by the intuitive PRONET AX control and monitoring software developed by the PROEL R&D team. Integrated rigging hardware is seamlessly compatible with the AX2065P.





## AX800A

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### Dual 8" Powered Vertical Line Array

The AX800A defines the standard by which small format compact line array performance can be measured, in portable and fixed sound reinforcement applications where ease of setup and use together with quality sound are critical. Born out of intensive research at Proel's R&D laboratories into advanced technologies and modern lightweight materials, its organically styled enclosure creates the definitive shape that's totally at home in the venue or on the road.

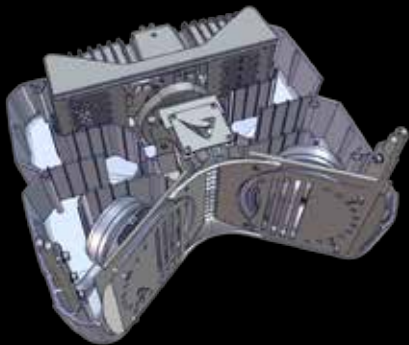
Carrying on the proud tradition of using only premium quality Italian-sourced transducers, the AX800A has been developed with total optimisation of the speaker components in mind – from the lightweight woofer cone materials through to the titanium diaphragm used in the high frequency compression driver. Rigorous measurement and long term durability testing has ensured that every single finished product will meet the demands of every professional application.

Housing two eight-inch low frequency drivers, which are transmission line back-loaded for a significant reduction in low range frequencies at the rear of the speaker, the AX800A delivers natural cardioid behaviour and therefore clean mid-bass reproduction. This is especially important in preventing the "boxy" mid-bass sound commonly obtained from regular bass-reflex enclosures, or the build up of excessive low-mid frequencies behind an array and on stage that can be annoying for performers.

Completing the driver complement is a 1.4-inch titanium diaphragm compression driver loaded by an acoustic transmission line waveguide providing natural sounding high frequencies. The components are arranged in a very compact WTW driver configuration, which lends itself to correct line array behaviour, providing wide and even horizontal coverage of any venue or audience space.







The AX800A enclosure is moulded from structurally rigid polypropylene, internally ribbed to eliminate cabinet resonances, and provides the transmission line back loading path for the two 8" woofers, also allowing the rigging hardware to be fully integrated.

The AX800A and matching SW1800A powered subwoofer together make a formidable plug-and-play solution for a myriad of portable sound reinforcement situations, with the dual 18" SW1800A providing the lower octave of full frequency response, and enough SPL and coverage for small to medium indoor or outdoor events.

Two AX800A cabinets can be pole mounted, with adjustable height and angle, over one subwoofer to give a powerful system for corporate audio-visual and small band applications that is quick and easy to set up and obtain consistently repeatable performance.



A close-up, high-angle photograph of a dark, textured speaker grille, likely part of a subwoofer, set against a black background. The grille has a fine, woven mesh pattern and a prominent border.

## KEY FEATURES

- Very high energy at sub-bass and bass frequencies
- Manifolded Transmission Line, Manifolded Bandpass and horn loaded configurations
- Long excursion split coil for extended linear response
- Tetracoil Dual Voice Coils
- Water repellent, reinforced speaker cones
- Digitally controlled Class D amplifier module with SMPS
- 96KHz / 40 bit floating point CORE processing
- PRONET AX remote control software

SW series subwoofers are designed to provide highly energetic sub-bass support for AX series line arrays and ED series point source loudspeakers. They are designed to be physically and acoustically compatible with all AXIOM systems in a wide variety of indoor and outdoor concert touring, festival, and fixed installation applications. Powered versions offer unparalleled levels of performance and convenience of operation with minimal weight penalty.



SW SUBWOOFERS





# SW SUBWOOFERS

AXIOM subwoofers are designed to deliver high output low frequency reproduction with well defined bass response and excellent transient response to partner AX series line array systems.

High power custom designed Italian made transducers are used in all AXIOM subwoofers.

Where extreme coil excursion is demanded of a sub-bass transducer, high stiffness Double Silicon Spiders and Inner Flux Demodulating Rings ensure that voice coils remain totally centred and under complete mechanical and thermal control in critical show conditions.

The 18" drivers of the SW218X and SW36XF use Tetracoil Technology to derive very long excursion (up to 30mm peak to peak) from inside-outside wound dual coils which are centred in two axially separated magnetic gaps. The resultant dual coil, although only 4" in diameter, provides equivalent performance to a single coil larger than 6", giving better heat dissipation and increased power handling.

Direct radiating AXIOM subwoofers use Interleaved Sandwich aluminium Voice Coils (ISV), which together with the die-cast basket



increases efficiency, improves heat dissipation, and reduces power compression.

AXIOM subwoofers feature water-repellent speaker cones, making them very resilient in outdoor concert touring and festival situations where the drive units may be exposed to damp conditions. This treatment significantly prolongs the expected component life when on tour.

The Manifoldded Transmission Line combines two acoustic principles: manifold loading the output of two cone drivers for beneficial mutual coupling and improved efficiency, while simultaneously transmission line loading the rear of the cones, thereby speeding up transient response and further increasing efficiency.

Manifoldded Bandpass technology similarly brings together two concepts: loading the front of two driver cones into a manifold with the advantages of band pass design for higher efficiency in the upper bass region.

Powered AXIOM subwoofers feature digitally controlled Class D amplifier modules with SMPS (switch mode power supplies). These are among the most powerful in the industry, employing a variable switching frequency that varies with input level to deliver audio performance comparable to audiophile Class AB designs, but with vastly improved efficiency (better than 90%), as well as much lower weight and reduced size.

System processing for AXIOM active subwoofers is based on the CORE DSP platform developed by PROEL's R&D laboratories, using one of the most advanced SHARC DSP chips available for audio applications. 40-bit, 96 kHz floating point resolution and top quality A-D converters ensure perfect signal integrity, dynamic range in excess of 110 dB, and superior sonic performance.

Remote control of AXIOM subwoofers is conveniently implemented by PRONET AX control software running on a Windows® PC. The free software, which works on the very stable and reliable CANBUS protocol, provides an intuitive user interface for remote control of the whole system, offering access to equalisation, multiple delays, driver protection, and overall amplifier status monitoring.





## SW2100A

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### High Output 21" Powered Subwoofer

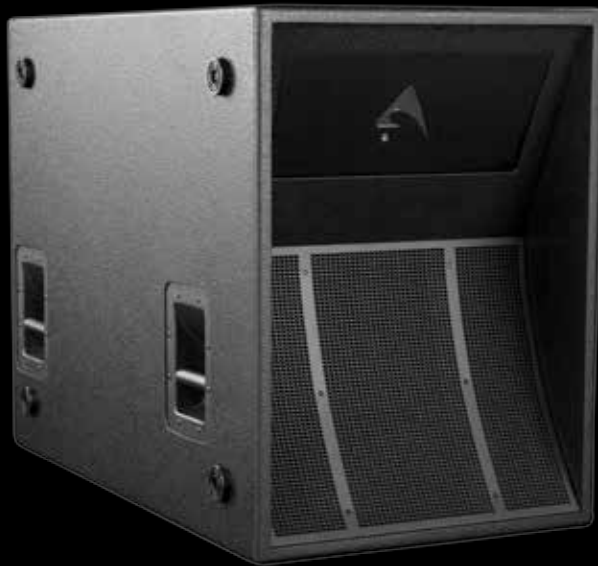
The SW2100A is a high output powered subwoofer designed to be used with the AX12C column array. It features a 4000 watt Class D amplifier module with power factor correction and 96kHz / 40 bit CORE digital signal processing, which powers the internal loudspeaker as well as up to four external columns. The drive unit is a 4" voice coil 21" neodymium transducer equipped with triple-roll suspension to maintain linear coil travel over the very high excursion needed to deliver exceptional SPL at frequencies as low as 23Hz. The amplifier module provides optimised presets for use in conjunction with one, two, or four AX12C elements, as well as a user-defined preset.

An integrated metal plate provides the facility to mount up to two AX12C columns on top using the dedicated aluminium brackets. Rear-mounted heavy duty wheels enable transportation.









## SW121HLP

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### 21" Horn-loaded Subwoofer

The SW121HLP delivers high quality low frequency reproduction where very high output is a key requirement, together with well defined, extended bass response, and fast transient response. The enclosure's special horn-loaded configuration is based on a small rear cavity and a very compact folded horn. With this design and specific processing, the SW121HLP is ideal for use as a ground stacked 'infra-sub' as part of a four-way AX2010 or AX2065 line array system, providing impressive low frequency extension with usable response down to 32 Hz as well as 'punchy' upper bass reproduction. The proprietary Italian designed high power 21" driver and the compact size of the cabinet contribute to excellent output-to-weight ratio, producing maximum peak output of 141 dB.

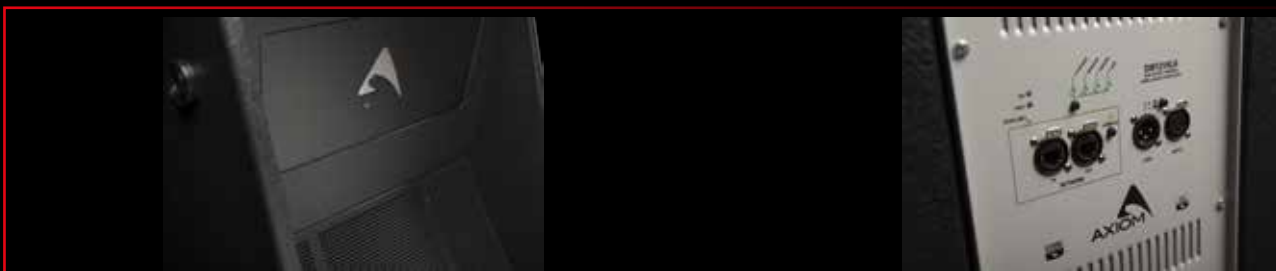
## SW121HLA

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### 21" Powered Horn-loaded Subwoofer

The powered version of this efficient subwoofer takes convenience and repeatable performance to a new level. Featuring a fully integrated lightweight Class D amplifier module with switch mode power supply, a system of AX2010A or AX2065 line array modules and SW121HLA subwoofers can be set up in minutes with minimal cabling and a high degree of system control. As such the SW121HLA is a compelling proposition as part of a high power sound reinforcement system for rental companies as well as being well suited for fixed installations in theatre or live music venue applications. The CORE DSP processing platform ensures perfect signal integrity, dynamic range in excess of 110 dB, and superior sonic performance. PRONET AX control software provides intuitive remote control, with full user access to system EQ, delay, protection settings, and amplifier status monitoring.

Both subwoofer models are equipped with heavy duty wheels to aid in handling and transportation.







## SW36XFP

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### Dual 18" Manifolded Bandpass Subwoofer

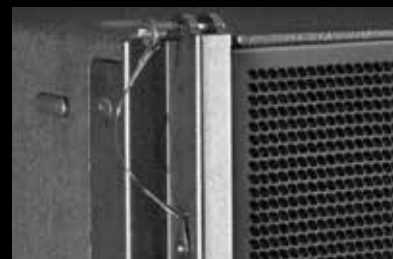
Designed to be flown with AX2010P line array modules, the SW36XFP provides an elegant solution to delivering 'bass in the sky' from a flown cluster, with usable response down to 36 Hz. When positioned at the top of the array its integrated rigging hardware mates with the AX2010P and the curved grille profile also matches the AX2010, forming a neat and unobtrusive cluster. Offering impressive efficiency from a compact cabinet, the SW36XFP uses a combination of manifold and bandpass loading techniques to achieve an impressive 143 dB peak output. Its dual 18" low frequency drivers feature 4" Tetracoil dual voice coils, which have the equivalent performance to a single 6" voice coil.

## SW36XFA

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### Dual 18" Powered Manifolded Subwoofer

The powered SW36XFA features an integrated 4000 watt class D amplifier module that provides convenience and simplicity of connection for concert touring applications, or will benefit larger fixed installations such as dance clubs, sports halls, stadia, and large conference rooms. It will deliver high sound pressure level at bass frequencies, with abundant headroom to deliver the fast transient response that brings live performances and electronic music to life. Its two custom 18" drivers feature 4" Tetracoil dual voice coils, which are capable of very high excursion and hence have the ability to move significant amounts of air. PROEL's CORE DSP processing ensures that the SW36XFA is capable of perfect signal integrity, dynamic range in excess of 110 dB, and superior sonic performance.





## SW218P

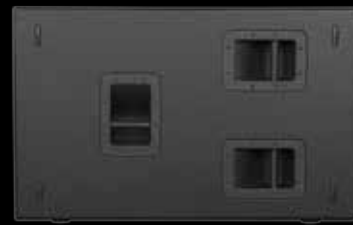
### High Output Dual 18" Manifolded Subwoofer

The SW218P is a dual 18" manifolded transmission line subwoofer designed for ground stacked sub-bass support of AX2010 line arrays in demanding concert touring applications where high output and good bass definition is required from an easily transportable and road-ready cabinet. It uses two proprietary 18" woofers with high excursion 4" voice coils to generate significant low frequency energy to provide real impact to live music. The birch plywood cabinet includes multiple recessed handles and heavy duty wheels for easy loading in and out of venues, and is also equipped with stacking feet and matching recesses to enable the building of stable ground stacks.

## SW218A

### Dual 18" Powered Manifolded Subwoofer

The powered SW218A features an integrated 4000 watt class D amplifier module that provides convenience and simplicity of connection for concert touring applications, and also for fixed installations in discotheques and live music clubs. It will deliver high sound pressure level at bass frequencies, with abundant headroom to deliver the fast transient response that brings live performances and electronic music to life. Its two custom 18" drivers feature inside-outside wound voice coils, which are capable of very high excursion and hence have the ability to move significant amounts of air. PROEL's CORE DSP processing ensures that the SW218XA is capable of perfect signal integrity, dynamic range in excess of 110 dB, and superior sonic performance.





## SW218XP

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### Dual 18" Manifolded Subwoofer

The SW218XP offers twice the output of the SW218P in the same size enclosure, so making it ideal for rental companies looking to increase total system SPL capability for the same amount of physical inventory. It is well suited to top level concert touring and festival applications requiring higher levels of low frequency response such as hard rock and electronic music. It does this by utilising the unique 4" Tetracoil, two separate voice coils wound on both side of the same former and suspended in two axially separated magnetic gaps, enabling extreme excursion of the cone and suspension system. The reinforced birch plywood enclosure is fitted with stacking feet to enable stable ground stacks, and heavy duty wheels for easy transportation.

## SW218XA

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### Dual 18" Powered Manifolded Subwoofer

The powered SW218XA is recommended for high level dance music clubs and touring systems requiring very strong sub-bass energy with its 4000 watt class D amplifier module generating peak output of up to 143 dB, and extended low frequency response. Its output is actually twice that of the SW218A, thanks to the extended excursion of the 4" Tetracoil-equipped drive units. The integrated CORE DSP processing allows for remote control of critical operating parameters, as well as comprehensive system monitoring. The reinforced birch plywood enclosure is fitted with stacking feet to enable stable ground stacks, and heavy duty wheels for easy transportation.





## SW1800A

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### Dual 18" Powered Manifolded Subwoofer

The SW1800A is designed to complement the AX800A compact line array in portable and fixed install applications, and deliver high efficiency and punchy bass performance from a compact cabinet. The two custom 3" voice coil 18" drivers are loaded by a manifolded bandpass design that maximises mutual coupling between the drive units to gain advantages in definition both at the lowest frequencies and in the upper bass region. The integrated Class D amplifier with SMPS delivers 1000 watts into each driver individually, offering superior sound quality with very low distortion even down to sub-bass frequencies. The birch plywood cabinet is equipped with heavy duty wheels, stacking feet, flush handles, and two pole mount sockets to allow flexible mounting arrangements.





## SW215P/SW215FP

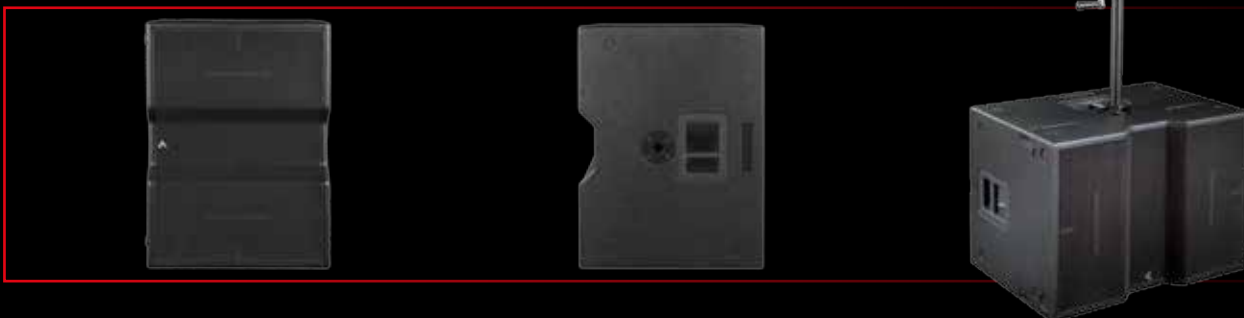
### Dual 15" Manifolded Subwoofer

The SW215P is a compact double 15" subwoofer designed for high quality sound reinforcement in touring applications such as musicals, fashion shows, and corporate events, and also for fixed installations such as live music venues, theatres, and concert halls. It is especially effective in side fills or drum fills to provide solid and cohesive bass response. The SW215P features a unique, innovative Manifolded Bandpass cabinet configuration to deliver articulate and punchy upper bass frequencies with an emphasis on the 60 Hz to 90 Hz region where much of the impact of today's music is felt, and is physically and sonically compatible with the AX2065 compact line arrays. The combination of two loading techniques – manifolding the front sides of the speaker cones to maximise mutual coupling between drivers, and at the same time employing bandpass loading to increase efficiency – gives excellent definition of bass frequencies and 139 dB peak output from a cabinet of modest dimensions. The SW215FP is a flown version of the SW215P, with integral flying hardware.

## SW215A/SW215FA

### Dual 15" Powered Manifolded Subwoofer

The SW215A includes a 2000 watt Class D amplifier module with advanced CORE DSP processing for optimised sound reproduction in fixed installations, avoiding the need for long speaker cable runs. Systems of SW215 subs and AX2065 series line array modules can be very easily controlled and monitored with PROEL's intuitive PRONET AX software running on a Windows PC, providing a high degree of driver protection and security. Integrated rigging hardware on the SW215FP and SW215FA makes them ideal for mobile rental applications, and heavy duty wheels are also included. The SW215FA is a flown version of the SW215A, with integral flying hardware.





## SW18P

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### 18" Direct Radiating Subwoofer

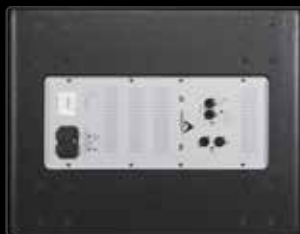
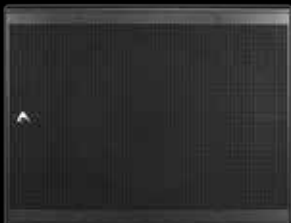
The SW18P is a high power compact subwoofer designed to partner ED series point source loudspeakers for fixed installations in discotheques, nightclubs and bars, and live music clubs, and for portable corporate audio-visual applications. It features a high excursion 4" voice coil, 18" driver equipped with a double centred spider that maintains linear voice coil travel even at high output levels. The phenolic birch plywood cabinet is equipped with pole mount socket, stacking feet, flush handles, and heavy duty wheels to enable easy handling and transportation.

## SW18A

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### 18" Powered Direct Radiating Subwoofer

The powered SW18A features an integrated 2000 watt class D amplifier module that provides convenience and simplicity of connection for portable sound reinforcement applications, and also for fixed installations in discotheques and live music clubs. It will deliver punchy bass performance from a very compact cabinet, and thanks to the integral pole mount socket partners well with any of the ED series of point source loudspeakers in portable corporate audio-visual applications, while its small size enables it to be easily fitted into tight venue spaces.





## SW210P

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### Dual 10" Direct Radiating Subwoofer

The SW210P is a very compact direct radiating subwoofer that due to its low profile is ideal for permanently installing in live music, nightclub and bar environments where subs may have to be fitted under seating or in confined spaces. The two custom 10" drivers feature advanced suspension mechanics that allow extremely linear voice coil travel even under high excursion conditions, and can move significant amounts of air to provide powerful and dynamic bass performance. Threaded rigging points are also provided on the phenolic birch plywood cabinet to enable it to be flown within suspended ceilings in retail or leisure environments.





# ED POINT SOURCE



## KEY FEATURES

- Arrayable Point Source loudspeakers
- Wide range of models for a variety of applications
- Constant coverage and excellent directivity control
- Near-field and mid-field sound reinforcement applications
- Passive and bi-amped format
- High quality, low distortion drivers
- Medium and wide dispersion patterns
- Audiophile-grade passive crossover networks
- Multiple integral rigging points

ED point source systems are designed for indoor and outdoor sound reinforcement applications ranging from clubs, bars and restaurants to theatres, live music venues, houses of worship and themed environments. Passive ED series loudspeaker systems are easy to set up and simple to operate, while the bi-amped models offer a higher level of performance and system control.







AXIOM ED series point source loudspeakers provide a range of constant and asymmetric coverage patterns to suit portable or fixed system applications that require precisely tailored coverage in both horizontal and vertical planes, such as corporate audio-visual, live venues, nightclubs and bars, and houses of worship. In the larger cabinets the waveguides are rotatable within the enclosure, so allowing them to be mounted horizontally for example where ceiling height is limited while maintaining wide horizontal coverage. Additionally this feature enables the assembly of modular, multiple-speaker arrays, supported by the integral M10 and M5 rigging points, with coverage that accurately matches the audience space. Their non-symmetrical cabinet shape also allows use as stage monitors with a 35° monitor taper, while the two smallest models are ideally suited for stage lip fill and many other near-field applications.

Custom designed Italian-made transducers used in the ED series feature edge-wound aluminium voice coils for high efficiency, special high strength wood pulp cones with water-repellent treatment for longevity in humid environments, and progressive rubber suspensions for good low frequency control.





# ED POINT SOURCE





## ED120P

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### Passive 12" Two-way Full Range Loudspeaker

The ED120P is a two-way full range enclosure containing a 12" LF drive unit and a 1.4" HF compression driver, and is designed for multi-purpose sound reinforcement applications, either on its own or if extended frequency response is required with additional subwoofers from the AXIOM range.

The ED120P features an asymmetric HF coverage pattern, varying from 100° horizontal in the lower part of the horn for more effective near field coverage, and narrowing to 60° horizontal at the top of the horn for more focused coverage in the far field. The result is more accurate coverage of a typical auditorium than is possible with a fixed horizontal coverage device. The HF horn is also rotatable through 90° by simply removing four screws and re-aligning the horn, so that coverage can also be optimised for stage monitor use. This rotatable horn feature also makes it possible to maintain the ideal coverage pattern when the cabinet is installed in a horizontal (landscape) orientation.

## ED120A

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### Powered 12" Two-way Full Range Loudspeaker

The ED120A is a powered version of the ED120P. This versatile loudspeaker delivers consistently repeatable performance due to the four factory presets provided by the PROEL CORE digital signal processing in the integrated Class D amplifier module. It is truly a multi-purpose speaker product, with applications as diverse as front of house sound reinforcement, nightclubs and bars, delay systems, theatre, TV and broadcast, live music venues, and corporate audio-visual. With its rotatable asymmetric HF dispersion pattern, coverage of a typical venue is optimised for both the front and back of the audience space. A pole mount socket and flush handles make the ED120A easy to transport and use in portable situations, while the integrated rigging points enable suspension in permanent installations.







## ED80P

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### Passive 8" Two-way Full Range Loudspeaker

The ED80P consists of an 8" LF drive unit and a 1" HF compression driver loaded by an asymmetric HF horn in a compact enclosure, designed for many multi-purpose sound reinforcement activities ranging from corporate audio-visual to permanent installations for bars and restaurants, theatres, live music venues, retail and leisure outlets, and houses of worship. Its asymmetric dispersion pattern provides optimal coverage of typical rectangular venues, with wider dispersion at the front and narrower dispersion at the rear.

This versatile loudspeaker can also be used as a low profile stage monitor with its 35° tapered side, and in this situation the HF horn can be rotated to maintain the best coverage pattern for performers both near to and further away from the monitor.



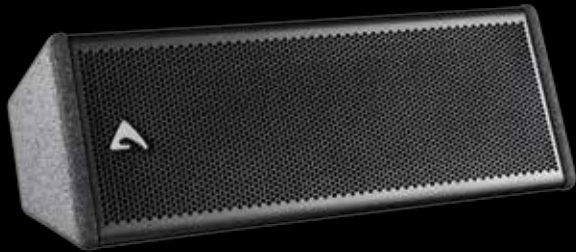
## ED60P

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### Passive 6" Two-way Full Range Loudspeaker

The ED60P shares all of the characteristics of the larger ED80P and ED120P, but in an unobtrusive and more compact format. It is designed for a multitude of near field applications such as theatre under-balcony fill, stage front fill, delay speaker, bar and restaurant audio, and discreet stage monitor. Its asymmetric HF horn can be rotated through 90°, allowing it to retain the optimum dispersion pattern when mounted horizontally. A pole mount socket and recessed flush handle make this a very versatile loudspeaker in both portable and permanently installed applications.





## ED25P

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### Dual 5.25" Passive Full Range Loudspeaker

Designed for near-field sound reinforcement applications such as television, stage front, conferencing, theatres, and audio-visual, the ED25P is an ultra-compact passive two-way loudspeaker that can be used either on its own or in small loudspeaker arrays creating even and seamless coverage. Its two 5.25" woofers and high frequency dome tweeter with Spherical Wave Guide Horn are arranged in a WTW linear enclosure configuration to give a wide dispersion pattern that works well in fixed installations using a minimal number of units. The cabinet is trapezoidally shaped, and also asymmetrical, and this profile not only allows the assembly of small clusters using the integral flypoints, but also enables it to be suspended horizontally very close to a ceiling or placed on a stage front as a low profile monitor.



## ED23P

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### Dual 3.5" Passive Full Range Loudspeaker

The ED23P passive full range loudspeaker fulfils all of the applications for which the larger ED25P is suited, but does so from an even more compact cabinet housing two 3.5" woofers and a high frequency dome tweeter mounted on a Spherical Wave Guide Horn. The WTW driver arrangement provides a wide dispersion pattern that allows widely spaced units to cover large spaces with high quality background sound. Due to its very low profile, the ED23P is an ideal stage lip monitor, and especially useful for fashion show catwalks where it can be unobtrusively provide alternate inwards / outwards coverage for both audience and presenters.

The ED23P and ED25P both feature high quality passive crossovers for efficient use of available amplifier power and simplicity of operation.







## CX15A

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### Coaxial Powered Stage Monitor

The CX15A is a high power co-axial powered stage monitor designed to provide exceptional intelligibility and high gain before feedback on concert stages where minimal physical impact is desirable. It is ideally suited to live sound stage monitoring, as well as to theatre and television applications. The co-axial driver configuration eliminates the time and phase problems that can occur with discrete non-coincident sources, and provides a very small footprint on stage while giving the output of a much larger unit. The dispersion pattern is optimised for general purpose monitoring applications at 80° conical, so allowing performers freedom to move around on stage but still stay within the coverage pattern.

The reflex ports, instead of being located on the baffle where they can cause destructive interference, are on the front of the cabinet and aimed towards the floor where some beneficial mutual coupling occurs in the 80 Hz region, tightening up the bass response and increasing definition. The ports also provide an efficient cooling method for the amplifier.

An advanced level of operating convenience and consistent performance is made possible by the integrated Class D amplifier with CORE DSP processing, with all the controls and connectors conveniently placed on a recessed side panel. The innovative technology developed by PROEL's R&D team and used in the CX15A, including the lightweight and efficient switch mode power supply (SMPS), offers top of the range performance while being very quick to set up even with multiple monitor mixes, without the complexity of speaker cables. The CX15A is very flexible in its positioning, made possible by the provided DSP presets that cater for use either as single units, in separated left / right pairs, or side by side.

The CX15A delivers an exceptional combination of high power, on-board amplification, and remote control in a compact, lightweight package. It is equipped with a dual angle pole mount socket on one side of the cabinet, so allowing it to be additionally used as a high quality front of house loudspeaker.







# CX STAGE MONITORS

- High output Coaxial Stage Monitor
- Very compact size and low-profile design
- Single magnet neodymium motor
- 80° constant coverage
- Front tuning ports
- 96KHz / 40bit floating point CORE processing with PRONET AX remote control
- Digitally controlled Class D amplifier module with SMPS





# QC AMPLIFIERS

AXIOM QC series amplifiers are high performance 2U rack mount models with built-in DSP, designed for powering large touring PA systems or loudspeaker systems in high-profile fixed installations. They are available in standard two channel configurations for powering typically a pair of full range loudspeakers or frequency band of a stereo multi-way speaker system; or in a four channel format for use with large multi-cabinet PA systems or for multiple monitor mixes. QC series amplifiers are fully networkable using the highly stable CANBUS protocol, so making it possible to set up and control a large network of devices – including amplifiers, powered speakers, and PROEL PC260 speaker processors – in a complex fixed install.

This new generation of digitally controlled Class D power modules with switch mode power supplies (SMPS) feature innovative and very efficient power supply technology with significant benefits over currently available designs. Rather than relying on a commonly used fixed switching frequency, the QC series amplifier design uses a variable switching frequency which varies according to the input signal level, giving high-fidelity sound quality that can be compared with pure audiophile, top-of-the-range, Class AB designs, but with the added advantages of lower weight, better than 90% efficiency, and negligible heat dissipation. The improvement in operating efficiency is a big contributing factor to an overall reduction in wasted energy that is often associated with large and complex sound system installations.

Signal processing is based on the CORE DSP platform developed by PROEL's R&D laboratories, using one of the most advanced SHARC DSP chips available today for high quality audio applications. Thanks to its substantial processing power, the CORE DSP platform can provide the most sophisticated algorithms for enhanced speaker processing, together with comprehensive remote control and system monitoring capabilities.

QC series amplifiers can be remotely controlled with PROEL's proprietary PRONET AX software, which provides an intuitive user interface for control of the DSP features in the amplifier, and for monitoring of the amplifier's overall status. This allows the user access to many of the loudspeaker system's operating parameters such as equalisation, multiple delays, and individual driver protection.

Based around a lightweight 2U chassis with an aluminium front panel, QC series amplifiers are equally at home on tour or in fixed installs. Airflow is from front to rear, aided by whisper-quiet variable speed fans, and the removable dust filters are accessible from the front for easy maintenance when racked.



## QC4.2

Four Channel DSP Amplifier

## QC4.4

Four Channel DSP Amplifier

## QC2.4

Two Channel DSP Amplifier with PFC

The four channel QC4.2 delivers 500 watts per channel at 4 ohms, and is recommended for powering a fixed installation system consisting of either multiple ED23P or ED25P point source speakers with full range response, or a combination of ED23P or ED25P satellites in combination with ED112P subwoofers using the on-board DSP to split the frequency bands. Any pair of channels can be bridged to drive more power into a subwoofer load.

The QC4.4 provides four channels of 1000 watts at 4 ohms, and is the preferred option to power multiples of the bi-amped AX2010P or AX2065P line arrays.

The most powerful in the series, the QC2.4 is a two channel unit delivering 2000 watts per channel at 4 ohms and featuring PFC (Power Factor Correction), a technology able to guarantee always the highest level of power regardless of any eventual fluctuations of the power supply. QC2.4 is ideal for use with subwoofers from the Axiom SW series, either bridged with a single driver model like the SW121HLP, or in two channel mode with dual driver subwoofers such as the SW36XFP, SW218P or SW218XP.

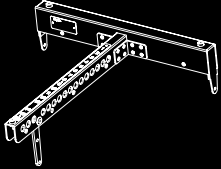
	QC4.2	QC4.4	QC2.4
Number of Channels	Four (single) or Two (bridged)	Four (single) or Two (bridged)	Two (single) or One (bridged)
Power Output @ 8 Ohms	4x250 watts	4x500 watts	2x1000 watts
Power Output @ 4 Ohms	4x500 watts	4x1000 watts	2x2000 watts
Power Output @ 8 Ohms Bridged	2x1000 watts	2x2000 watts	1x4000 watts
Dimensions (wxhxd)	483x89x383mm (19x 3.5x16.2")	483x89x383mm (19x 3.5x16.2")	483x89x463mm (19x 3.5x18.2")
Net Weight	11 kg (24.3 lbs)	11 kg (24.3 lbs)	11 kg (24.3 lbs)



# ACCESSORIES

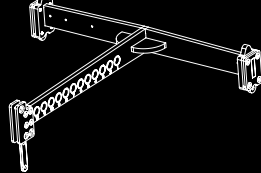
**KPTSW215**

Flying bar for AX2065 and SW215



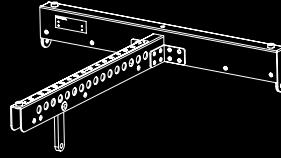
**KPTAX2065**

Flying bar for 6 AX2065



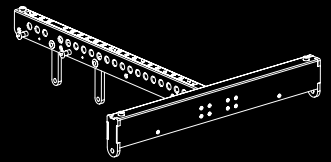
**KPTAX2012P**

Flying bar for 12 AX2010



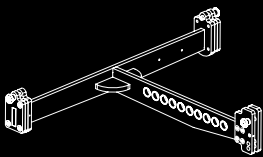
**KPTSW36X**

Flying bar for SW36X + AX2010



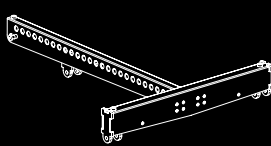
**KPTAX800**

Flying bar for 4 AX800A



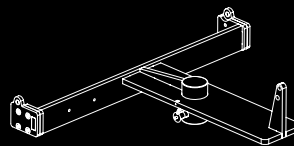
**KPTAX800L**

Flying bar for up to 12 AX800A



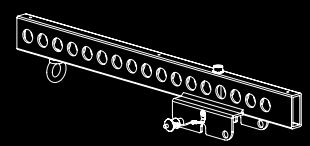
**KPAX8**

Pole Adapter for AX800A



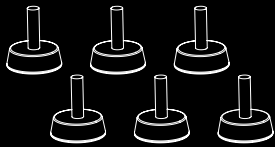
**KPTAX12C**

Flying bar for AX12C



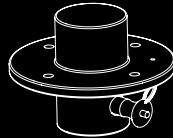
**AXFEETKIT**

Kit of 6pcs feet for stacked flying bar



**KPAX265**

Pole Adapter for AX2065



**DHSS10M20**

Adjustable Sub-Speaker ø35mm spacer with M20 screw



**KP210S**

Adjustable Sub-Speaker ø35mm spacer with M20 screw



**KP010**

Professional heavy-duty adapter, made of aluminium alloy, suitable for stands with ø 35 mm end tube



**KPTED23B**

Wall mounting 'C' bracket for ED23P



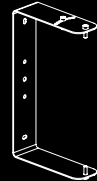
**KPTED25B**

Wall mounting 'C' bracket for ED25P



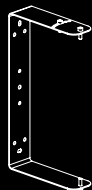
**KPTED60B**

Wall mounting 'C' bracket for ED60P



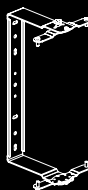
**KPTED80B**

Wall mounting 'C' bracket for ED80P



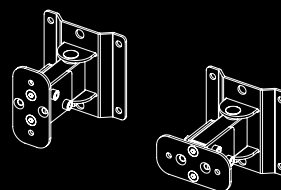
**KPTED120B**

Wall mounting 'C' bracket for ED120A/P



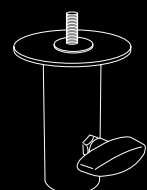
**KPTLTP**

Wall mounting bracket for ED SERIES



**PLKP182ED**

Pole mount adapter for ED23P and ED25P



**PLG716**

Galvanized steel stud



**ESO2500LU025**

speakON cable 4-wire mt. 0.25 for AX12C



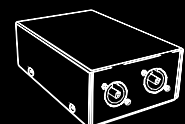
**ESO2550LU025**

speakON cable 4-wire mt. 0.25 Twist for AX12C



**ESOSPK-Y-PATCH**

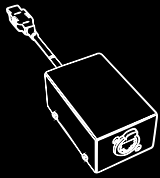
speakON y patch box for AX12C



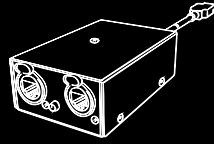


**USB2CAN**

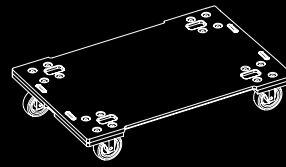
USB to CAN converter

**USB2CAND**

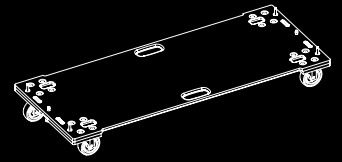
Dual output USB to CAN converter

**AXSKATE20P**

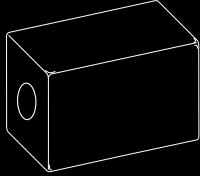
Skate for 2 AX2010

**SW218XSKATE**

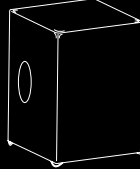
Skate for SW218X

**COVEREDSW218**

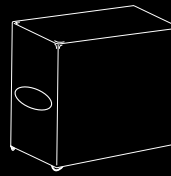
Cover for SW218/SW218X

**COVERSW215**

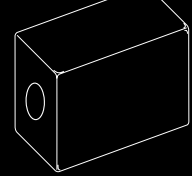
Cover for SW215

**COVERSW121HL**

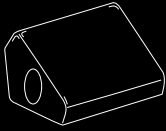
Cover for SW121HL

**COVERSW1800**

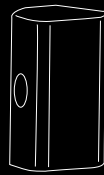
Cover for SW1800A

**COVERCX15A**

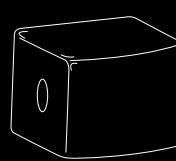
Cover for CX15A

**COVERED120**

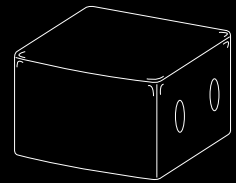
Cover for ED120

**COVERSW18**

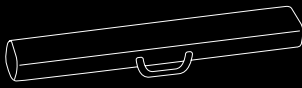
Cover for SW18

**COVERSW2100**

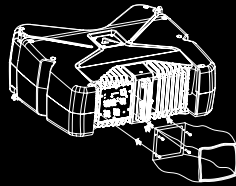
Cover for SW2100A

**COVERAX12C**

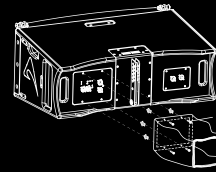
Cover for AX12C

**RAINCOV800**

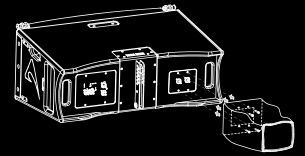
Rain cover for AX800A

**RAINCOV2010**

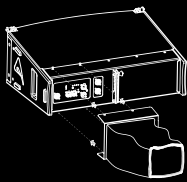
AX2010A rain cover for signal/control connectors

**RAINCOV2010PW**

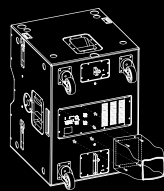
Rain cover for PowerCON / speakON connectors

**RAINCOV2065**

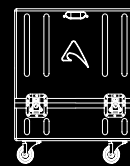
Rain cover for AX2065

**RAINCOV215**

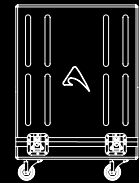
SW active rain cover

**AXCASE02**

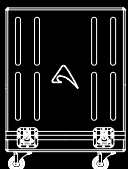
Flight-case for 2 AX2010

**AXCASE05**

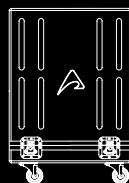
Flight-case for 4 AX2065 with KPTAX2065 flying bar

**AXCASE06**

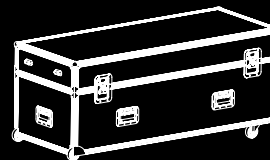
Flight-case for 4 AX2065

**AXCASE08**

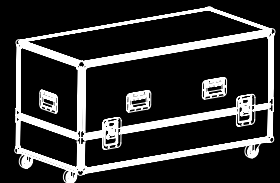
Flight-case for 4 AX800A

**AXCASE09**

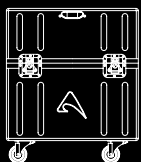
Flight-case for 2 AX12C

**AXCASE10**

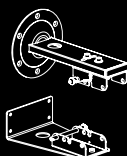
Flight-case for 4 AX12C

**CASECX15**

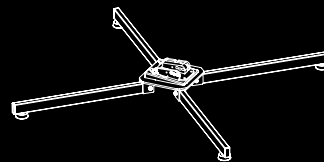
Flight case for 2 CX15A

**KPTWAX12C**

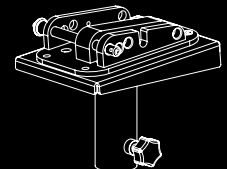
Wall bracket for AX12C

**KPTFAX12C**

Floor stand for AX12C

**KPTPOLEAX12C**

Pole adapter for AX12C



# ACCESSORIES

Any loudspeaker system designed for professional use on the road or as part of a prestigious fixed installation would not be complete without a full range of intelligently engineered rigging and transport solutions designed to enable rapid and intuitive deployment.

Rugged, weather-resistant road cases with truck pack friendly dimensions are available for efficient transportation of the AX series line arrays, constructed from 10mm multi-laminate plywood and equipped with heavy duty 100mm wheels. Cabinets can be pre-configured, with flybars attached, in the road cases to save time on set up.

	AX12C	AX800A	AX2010A	AX2010P	AX2065A	AX2065P	SW2100A	SW1800A	SW215A	SW215FA	SW215P	SW215FP	SW218A	SW218P	SW218XA	SW218XP
USB2CAN		•	•		•		•	•	•	•			•		•	
USB2CAN-D		•	•		•		•	•	•	•			•		•	
KPTSW215					•	•				•		•				
KPTAX2065					•	•										
KPTAX2012P			•	•												
KPTSW36X			•	•												
KPTAX800		•														
KPTAX800L		•														
KPAX8		•														
KPTAX12C	•															
KPTWAX12C	•															
KPTFAX12C	•															
KPTPOLEAX12C	•															
AXCASE02			•	•												
AXCASE05					•	•										
AXCASE06					•	•										
AXCASE08		•														
AXCASE09	•															
AXCASE10	•															
CASECX15																
AXSKATE20P			•	•												
SW218XSKATE															•	•
RAINCOV2010			•													
RAINCOV2010PW			•	•		•										
RAINCOV2065					•											
RAINCOV215								•	•	•			•		•	
RAINCOV800		•														
COVEREDSW218													•	•	•	•
COVERSW215									•	•	•	•				
COVERSW121HL																
COVERSW1800								•								
COVERCX15A																
COVERED120																
COVERSW18																
COVERSW2100							•									
COVERAX12C	•															
AXFEETKIT		•	•	•	•	•				•		•				
KPAX265					•	•										
DHSS10M20		•			•	•										
KP2105							•									
KP010					•	•										
KPTED23B																
KPTED25B																
KPTED60B																
KPTED80B																
KPTED120B																
KPTLTP																
PLKP182ED																
PLG716	•	•	•	•	•	•				•		•				
ES02500LU025	•															
ES02550LU025	•															
ES0SPK-Y-PATCH	•															

AX line arrays are flown using the elegant, lightweight, T-shaped flybars designed with multiple pickup and suspension points for flexibility of angling. The flybars include M10 threaded rigging points to enable ground stacking of AX line arrays when inverted. Subwoofers such as the SW215 can be integrated into a speaker cluster of AX2065 elements.

When used outdoors for concert touring or at festivals, flown loudspeaker systems must necessarily be protected from the effects of the weather. For these applications Rain Covers are optionally available to make the loudspeakers essentially shower-proof.

Adjustable straight speaker poles and angle adapters increase the flexibility of a subwoofer-mounted speaker system by allowing the satellite cabinets to be raised and angled incrementally downwards over a range of 0° to 10° for better audience coverage.

Professionally pre-cabled amplifier racks are available in various dedicated configurations to suit commonly implemented line array and point source systems. Constructed and fully tested by the world leader in cabling and accessories, the amplifier racks include mains distribution and signal connection panels. Inter-rack cabling is also available for connecting racks together with a single multi-way cable.

SW36XFA	SW36XFP	SW121HLA	SW121HLP	SW18A	SW18P	ED23P	ED25P	ED60P	ED80P	ED120A	ED120P	CX15A	QC4.2	QC4.4	QC2.4	
•		•		•						•		•	•	•	•	USB2CAN
•		•		•						•		•	•	•	•	USB2CAN-D
																KPTSW215
																KPTAX2065
																KPTAX2012P
•	•															KPTSW36X
																KPTAX800
																KPTAX800L
																KPAX8
																KPTAX12C
																KPTWAX12C
																KPTFAX12C
																KPTPOLEAX12C
																AXCASE02
																AXCASE05
																AXCASE06
																AXCASE08
																AXCASE09
																AXCASE10
												•				CASECX15
																AXSKATE20P
																SW218XSKATE
																RAINCOV2010
																RAINCOV2010PW
																RAINCOV2065
•		•	•	•												RAINCOV215
																RAINCOV800
																COVEREDSW218
																COVERSW215
		•	•													COVERSW121HL
																COVERSW1800
												•				COVERCX15A
										•	•					COVERED120
				•	•											COVERSW18
																COVERSW2100
																COVERAX12C
•	•															AXFEETKIT
																KPAX265
																DHSS10M20
				•	•											KP210S
																KP010
						•										KPTED23B
							•									KPTED25B
								•								KPTED60B
									•							KPTED80B
										•	•					KPTED120B
						•	•	•	•		•					KPTLTP
						•	•									PLKP182ED
•	•															PLG716
																ES02500LU025
																ES02550LU025
																ES05PK-Y-PATCH



# CUSTOMISATION

As an alternative to the standard black cabinet finish, that is designed to be discreet in the vast majority of installed and live sound applications and is supplied on all our plywood-construction loudspeakers, we also make some models available in a white textured paint finish (RAL 9010)



## AX SERIES

AX12CWH  
AX2010PWH  
AX2010AWH  
AX2065PWH  
AX2065AWH

## SW SERIES

SW36XFPWH  
SW36XFAWH  
SW215FPWH  
SW215FAWH  
SW210PWH

## ED SERIES

ED120PWH  
ED80PWH  
ED60PWH  
ED25PWH  
ED23PWH

## FLYING BAR for AX SERIES

KPTAX2012PWH  
KPTAX2065WH  
KPTSW215WH  
KPTSW36XFWH

## WALL BRACKET for ED SERIES

KPTED120WH  
KPTED80WH  
KPTED60WH  
KPTED25WH  
KPTED23WH

Custom colours according to specific RAL codes are available on request, that allow the speakers to blend in well with architect-designed projects and especially those venues with predominantly lighter colours.

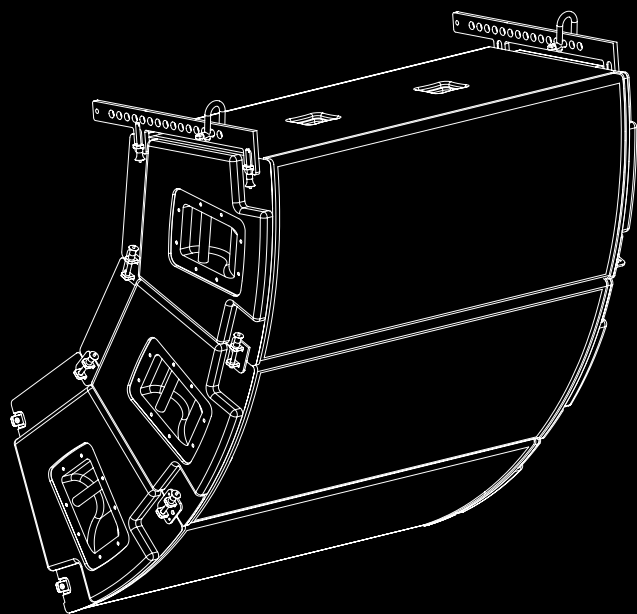




For installation projects with particular custom requirements we can offer, in addition to the various colour options mentioned here, certain mechanical customisation options such as load-rated integral rigging, alternative connectors, and higher IP ratings including weather-resistant finishes, silicon treatments, rust-resistant metal parts, and sealed cable entry glands.

For these special requirements our in-house manufacturing facilities offer real flexibility to ensure that our loudspeaker systems are fit for purpose and for your project. Please contact our sales department or consult our price lists for specifics of these optional services.

## CUSTOMIZED RIGGING SOLUTIONS



## CUSTOMIZED CONNECTIONS



## SPECIFIC WEATHER PROTECTIONS





AXIOM products are manufactured entirely in-house at PROEL's ultra-modern factory in Sant'Omero, Italy. This means that every aspect of the process from the cabinet construction to the immaculately finished product is managed and controlled under the most careful supervision – and while an artisanal philosophy is embraced with an emphasis on a highly skilled workforce, modern quality control standards to ISO9000/2008 are adopted.

Baltic birch plywood, manufactured using phenolic water-resistant adhesives, is used on all AXIOM speakers. Cutting and routing is handled by state-of-the-art CNC machines on a flexible macro scale which allows for rapid response to changing product demands, maintains highly efficient computer-generated material yield, and can even be used for prototyping purposes. Enclosures are finished either in low allergen content water-based paints or polyurethane paint under temperature and pressure controlled conditions, and custom colours are offered for easy product customisation.

All the compression drivers and cone transducers used in AXIOM are manufactured in Italy by well-known and respected driver makers, considered to be the undisputed leaders in their field. A fully automated CLIO measurement system ensures that every AXIOM product that leaves the factory meets precise technical specifications within tight tolerance limits, and most importantly has passed several critical listening tests.



THE FINEST ITALIAN  
CRAFTSMANSHIP



	<b>Configuration</b>	<b>Frequency Response</b>	<b>Nominal Impedance</b>	<b>Sensitivity</b>	<b>Max Peak SPL</b>	<b>Power Handling / Power Output</b>
<b>AX12C</b>	12 x 3.5"	180 Hz - 16 kHz (±3dB) (processed)	16 Ω	105 dB SPL @ 1m	130 dB SPL @ 1 m	360 W (AES) 720 W (prgm)
<b>AX2010P</b>	2 x 10" (2.5"VC) LF 2 x 1.4" (2.5"VC) HF	75 Hz - 18 kHz (±3dB) (processed)	8 Ω (LF) + 8 Ω (HF)	99 dB SPL @ 1m	138 dB SPL @ 1m	700 W LF, 150 W HF (AES) 1400 W LF, 300 W HF (prgm)
<b>AX2010A</b>	2 x 10" (2.5"VC) LF 2 x 1.4" (2.5"VC) HF	75 Hz - 18 kHz (±3dB) (processed)	N/A	N/A	138 dB SPL @ 1m	1000 W + 1000 W Class D
<b>AX2065P</b>	2 x 6.5" (1.5"VC) LF 1 x 1.4" (2.5"VC) HF	80 Hz - 18 kHz (±3dB) (processed)	8 Ω (LF) + 8 Ω (HF)	99 dB SPL @ 1m	129 dB SPL @ 1m	400 W LF, 75 W HF (AES) 800 W LF, 150 W HF (prgm)
<b>AX2065A</b>	2 x 6.5" (1.5"VC) LF 1 x 1.4" (2.5"VC) HF	80 Hz - 18 kHz (±3dB) (processed)	N/A	N/A	129 dB SPL @ 1m	1000 W + 1000 W Class D
<b>AX800A</b>	2 x 8" (2"VC) LF 1 x 1.4" (2.5"VC) HF	85 Hz - 16.8 kHz (±3dB) (processed)	N/A	N/A	132 dB SPL @ 1m	900 W + 200 W Class D
<b>SW2100A</b>	1 x 21" (4"VC)	34 Hz - 180 Hz (-6dB) (processed)	N/A	N/A	132 dB SPL @ 1m	2000 W + 2000 W Class D
<b>SW121HLP</b>	1 x 21" (5.3"VC)	31 Hz - 80 Hz (±3dB) (processed)	8 Ω	104 dB SPL @ 1m	141 dB SPL @ 1m	1800 W (AES) 3600 W (prgm)
<b>SW121HLA</b>	1 x 21" (5.3"VC)	31 Hz - 80 Hz (±3dB) (processed)	N/A	N/A	141 dB SPL @ 1m	4000 W Class D
<b>SW36XFP</b>	2 x 18" (4"VC)	36 Hz - 100 Hz (±3dB) (processed)	8 Ω + 8 Ω	N/A	143 dB SPL @ 1m	1800 W + 1800 W (AES) 3600 W + 3600 W (prgm)
<b>SW36XFA</b>	2 x 18" (4"VC)	36 Hz - 100 Hz (±3dB) (processed)	N/A	N/A	143 dB SPL @ 1m	2000 W + 2000 W Class D
<b>SW218P</b>	2 x 18" (4"VC)	30 Hz - 92 Hz (±3dB) (processed)	4 Ω + 4 Ω	101 dB SPL @ 1m	141 dB SPL @ 1m	800 W + 800 W (AES) 1600 W + 1600 W (prgm)
<b>SW218A</b>	2 x 18" (4"VC)	30 Hz - 92 Hz (±3dB) (processed)	N/A	N/A	141 dB SPL @ 1m	2000 W + 2000 W Class D
<b>SW218XP</b>	2 x 18" (4"VC)	30 Hz - 92 Hz (±3dB) (processed)	8 Ω + 8 Ω	N/A	143 dB SPL @ 1m	1800 W + 1800 W (AES) 3600 W + 3600 W (prgm)
<b>SW218XA</b>	2 x 18" (4"VC)	30 Hz - 92 Hz (±3dB) (processed)	N/A	N/A	143 dB SPL @ 1m	2000 W + 2000 W Class D
<b>SW1800A</b>	2 x 18" (3"VC)	36 Hz - 115 Hz (±3dB) (processed)	N/A	N/A	139 dB SPL @ 1m	1000 W + 1000 W Class D
<b>SW215P</b>	2 x 15" (3"VC)	39 Hz - 120 Hz (±3dB) (processed)	8 Ω + 8 Ω	102 dB SPL @ 1m	139 dB SPL @ 1m	700 W + 700 W (AES) 900 W + 900 W (prgm)
<b>SW215FP</b>	2 x 15" (3"VC)	39 Hz - 120 Hz (±3dB) (processed)	8 Ω + 8 Ω	102 dB SPL @ 1m	139 dB SPL @ 1m	700 W + 700 W (AES) 900 W + 900 W (prgm)
<b>SW215A</b>	2 x 15" (3"VC)	39 Hz - 100 Hz (±3dB) (processed)	N/A	N/A	139 dB SPL @ 1m	1000 W + 1000 W Class D
<b>SW215FA</b>	2 x 15" (3"VC)	39 Hz - 100 Hz (±3dB) (processed)	N/A	N/A	139 dB SPL @ 1m	1000 W + 1000 W Class D
<b>SW18P</b>	1 x 18" (4"VC)	36 Hz - 100 Hz (±3dB) (processed)	8 Ω	98 dB SPL @ 1m	132 dB SPL @ 1m	800 W (AES) 1200 W (prgm)
<b>SW18A</b>	1 x 18" (4"VC)	36 Hz - 100 Hz (-6dB) (processed)	N/A	N/A	132 dB SPL @ 1m	2000 W Class D
<b>SW210P</b>	2 x 10" (3"VC)	45 Hz - 120 Hz (-6dB) (processed)	4 Ω	97 dB SPL @ 1m	130 dB SPL @ 1m	350 W + 350 W (AES) 700 W + 700 W (prgm)
<b>ED120P</b>	1 x 12" (3"VC) LF 1 x 1.4" (2.4"VC) HF	65 Hz - 17 kHz (-6dB)	8 Ω	97 dB SPL @ 1m	128 dB SPL @ 1m	680 W (AES) 1360 W (prgm)
<b>ED120A</b>	1 x 12" (3"VC) LF 1 x 1.4" (2.4"VC) HF	65 Hz - 17 kHz (-6dB) (processed)	N/A	N/A	128 dB SPL @ 1m	900 W + 300 W Class D
<b>ED80P</b>	1 x 8" (2"VC) LF 1 x 1" (1"VC) HF	75 Hz - 18 kHz (-6dB)	8 Ω	95 dB SPL @ 1m	124 dB SPL @ 1m	280 W (AES) 560 W (prgm)
<b>ED60P</b>	1 x 6" (1.5"VC) LF 1 x 1" (1"VC) HF	85 Hz - 18 kHz (-6dB)	16 Ω	92 dB SPL @ 1m	114 dB SPL @ 1m	100 W (AES) 200 W (prgm)
<b>ED25P</b>	2 x 5.25" LF 1 x dome tweeter	125 Hz - 20 kHz (±6dB)	16 Ω	93 dB SPL @ 1m	116 dB SPL @ 1m	100 W (AES) 200 W (prgm)
<b>ED23P</b>	2 x 3.5" LF 1 x dome tweeter	200 Hz - 20 kHz (±6dB)	32 Ω	90 dB SPL @ 1m	112 dB SPL @ 1m	70 W (AES) 140 W (prgm)
<b>CX15A</b>	1 x 15" (3"VC) LF 1 x 1.4" (2.4"VC) HF	60 Hz - 18 kHz (±3dB)	N/A	N/A	131 dB SPL @ 1m	1000 W + 1000 W Class D



Coverage Angle @ -6dB points	Dimensions (WxHxD) mm / ins	Net Weight	Enclosure	Finish	Rigging	Connectors	
100° Horizontal	107 x 1166 x 193 4.2" x 45.9" x 7.6"	13 kg / 28.6 lbs	Aluminium extruded	Black paint White paint	Integrated system Optional brackets	speakON™	<b>AX12C</b>
110° H x 10° V	746 x 341 x 530 29.4" x 13.4" x 20.9"	39.9 kg / 87.9 lbs	15 mm phenolic birch plywood	Black textured paint White textured paint	Integrated system	speakON™	<b>AX2010P</b>
110° H x 10° V	746 x 341 x 530 29.4" x 13.4" x 20.9"	40.3 kg / 88.7 lbs	15 mm phenolic birch plywood	Black textured paint White textured paint	Integrated system	powerCON™, XLR, etherCON™ RJ45	<b>AX2010A</b>
110° H x 12° V	583 x 244 x 481 22.9" x 9.6" x 18.9"	19.2 kg / 42.3 lbs	15 mm phenolic birch plywood	Black textured paint White textured paint	Integrated system	speakON™	<b>AX2065P</b>
110° H x 12° V	583 x 244 x 481 22.9" x 9.6" x 18.9"	22.5 kg / 49.6 lbs	15 mm phenolic birch plywood	Black textured paint White textured paint	Integrated system	powerCON™, XLR, etherCON™ RJ45	<b>AX2065A</b>
100° H x 10° V	600 x 265.5 x 516 23.6" x 10.5" x 20.3"	25 kg / 55.1 lbs	Polypropylene	Black textured	Integrated system	powerCON™, XLR, etherCON™ RJ45	<b>AX800A</b>
N/A	511 x 554 x 770 20.1" x 21.8" x 30.3"	61 kg / 134.2 lbs	18 mm phenolic birch plywood	Black textured paint	N/A	powerCON™ TRUE1, XLR, etherCON™ RJ45	<b>SW2100A</b>
N/A	589 x 801 x 1022 23.2" x 31.6" x 40.2"	72 kg / 158.7 lbs	15 mm phenolic birch plywood	Black textured paint	N/A	speakON™	<b>SW121HLP</b>
N/A	589 x 801 x 1022 23.2" x 31.6" x 40.2"	78.2 kg / 172.4 lbs	15 mm phenolic birch plywood	Black textured paint	N/A	powerCON™ TRUE1, XLR, etherCON™ RJ45	<b>SW121HLA</b>
N/A	745 x 825 x 600 29.3" x 32.5" x 23.6"	87.4 kg / 192.7 lbs	15 mm phenolic birch plywood	Black textured paint White textured paint	Integrated system	speakON™	<b>SW36XFP</b>
N/A	745 x 825 x 600 29.3" x 32.5" x 23.6"	91.2 kg / 201.1 lbs	15 mm phenolic birch plywood	Black textured paint White textured paint	Integrated system	powerCON™ TRUE1, XLR, etherCON™ RJ45	<b>SW36XFA</b>
N/A	1215 x 590 x 950 47.9" x 23.2" x 37.4"	98 kg / 21.6 lbs	15 mm phenolic birch plywood	Black textured paint	N/A	speakON™	<b>SW218P</b>
N/A	1215 x 590 x 950 47.9" x 23.2" x 37.4"	101.7 kg / 223.7 lbs	15 mm phenolic birch plywood	Black textured paint	N/A	powerCON™ TRUE1, XLR, etherCON™ RJ45	<b>SW218A</b>
N/A	1215 x 590 x 950 47.9" x 23.2" x 37.4"	114 kg / 251.3 lbs	15 mm phenolic birch plywood	Black textured paint	N/A	speakON™	<b>SW218XP</b>
N/A	1215 x 590 x 950 47.9" x 23.2" x 37.4"	121.2 kg / 267.2 lbs	15 mm phenolic birch plywood	Black textured paint	N/A	powerCON™ TRUE1, XLR, etherCON™ RJ45	<b>SW218XA</b>
N/A	570 x 960 x 880 22.4" x 33.8" x 34.6"	70 kg / 154.3 lbs	15 mm phenolic birch plywood	Black textured paint	N/A	powerCON™ TRUE1, XLR, etherCON™ RJ45	<b>SW1800A</b>
N/A	571 x 800 x 582 22.5" x 31.5" x 22.9"	61 kg / 134.5 lbs	15 mm phenolic birch plywood	Black textured paint	N/A	speakON™	<b>SW215P</b>
N/A	571 x 800 x 582 22.5" x 31.5" x 22.9"	65 kg / 143.3 lbs	15 mm phenolic birch plywood	Black textured paint White textured paint	Integrated system	speakON™	<b>SW215FP</b>
N/A	571 x 800 x 582 22.5" x 31.5" x 22.9"	64.5 kg / 142.2 lbs	15 mm phenolic birch plywood	Black textured paint	N/A	powerCON™ TRUE1, XLR, etherCON™ RJ45	<b>SW215A</b>
N/A	571 x 800 x 582 22.5" x 31.5" x 22.9"	68.5 kg / 151 lbs	15 mm phenolic birch plywood	Black textured paint White textured paint	Integrated system	powerCON™ TRUE1, XLR, etherCON™ RJ45	<b>SW215FA</b>
N/A	650 x 500 x 564 25.6" x 19.7" x 22.2"	40 kg / 88.2 lbs	15 mm phenolic birch plywood	Black textured paint	N/A	speakON™	<b>SW18P</b>
N/A	650 x 500 x 564 25.6" x 19.7" x 22.2"	42.5 kg / 93.7 lbs	15 mm phenolic birch plywood	Black textured paint	N/A	powerCON™ TRUE1, XLR, etherCON™ RJ45	<b>SW18A</b>
N/A	650 x 310 x 410 25.6" x 12.2" x 16.1"	30 kg / 66 lbs	15 mm phenolic birch plywood	Black textured paint White textured paint	N/A	speakON™	<b>SW210P</b>
60° to 100° H x 60° V	360 x 610 x 310 14.2" x 24" x 12.2"	18 kg / 39.6 lbs	15 mm phenolic birch plywood	Black textured paint White textured paint	Rigging points Optional brackets	speakON™	<b>ED120P</b>
60° to 100° H x 60° V	360 x 610 x 310 14.2" x 24" x 12.2"	19 kg / 41.8 lbs	15 mm phenolic birch plywood	Black textured paint	Rigging points Optional brackets	powerCON™, XLR, etherCON™ RJ45	<b>ED120A</b>
60° to 120° H x 55° V	250 x 450 x 230 9.8" x 17.7" x 9.1"	8 kg / 17.6 lbs	15 mm phenolic birch plywood	Black textured paint White textured paint	Rigging points Optional brackets	speakON™	<b>ED80P</b>
70° to 120° H x 60° V	210 x 390 x 190 8.3" x 15.3" x 7.5"	5 kg / 11 lbs	15 mm phenolic birch plywood	Black textured paint White textured paint	Rigging points Optional brackets	speakON™	<b>ED60P</b>
80° H x 65° V	176 x 460 x 190 6.9" x 18.1" x 7.5"	7 kg / 15.4 lbs	15 mm birch plywood	Black textured paint White textured paint	Rigging points Optional brackets	speakON™	<b>ED25P</b>
80° H x 65° V	138 x 320 x 198 5.4" x 12.6" x 7.8"	6.4 kg / 14.1 lbs	15 mm birch plywood	Black textured paint White textured paint	Rigging points Optional brackets	speakON™	<b>ED23P</b>
80° H x 80° V	520 x 336 x 415 20.5" x 13.2" x 16.3"	18.5 kg / 40.8 lbs	15 mm phenolic birch plywood	Black textured paint	N/A	powerCON™, XLR, etherCON™ RJ45	<b>CX15A</b>







*The essence  
of Sound*



**AXIOM**  
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PROEL SPA  
(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

[axiomproaudio.com](http://axiomproaudio.com)