



### INDEX

The Brand		4
The Histo	6	
Research	8	
PRONET /	10	
AX	Line Arrays AX12C AX6C AX12LF AX2010P / AX2010A AX2065P / AX2065A AX800A	<b>12</b> 16 18 19 20 21 22
SW	Subwoofers SW2100A SW121HLP / SW121HLA SW36XFP / SW36XFA SW218P / SW218A SW218XP / SW218XA SW1800A SW215P / SW215FP SW215A / SW215FA SW18P / SW18A SW210P	24 28 30 31 32 33 34 35 35 36 37
ED	Point Source ED150P/ED150A ED120P/ED120A ED80P ED60P ED25P ED23P	<b>38</b> 42 43 44 44 45 45
СХ	Stage Monitors CX15A CX14A	<b>46</b> 48 49
CX QC	Power Amplifiers QC4.2 QC4.4 QC2.4	<b>50</b> 51 51 51
Accessori	52	
Customis	58	
Manufac	60	
Technica	62	

## AXIONA 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. The team embarked on the challenge of crystallising the requirements of professional users and translating these into innovative solutions that provide excellent sound quality, ease 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.

ii ii

ш п ш`п

PROEL

## THE JOURNEY STARTS HERE

PROEL LOGIST

# DESIGNED AND ENGINEERED



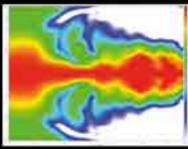
State-of-the-art analogue and digital electronic design



Advanced 3D modelling and mechanical engineering



Design and development of innovative acoustic solutions



Sophisticated acoustic analysis and simulation



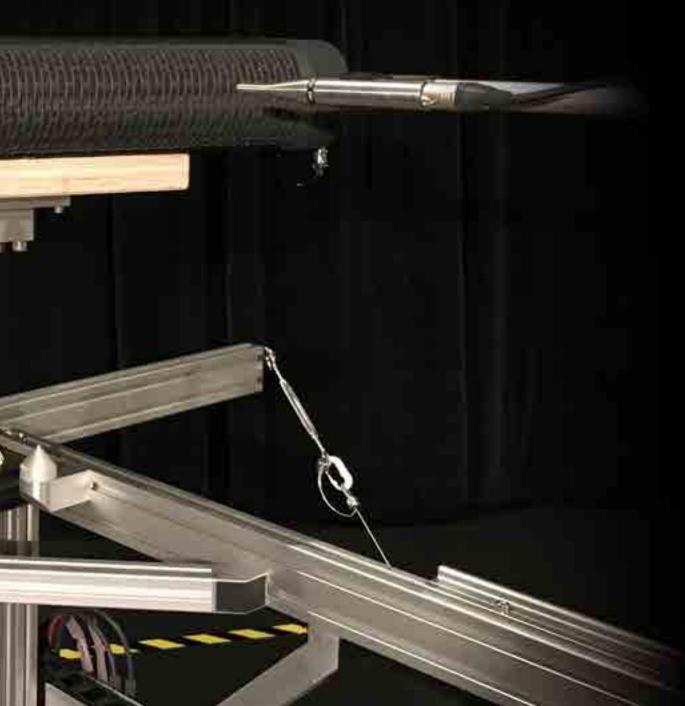
Skilful design and the application of appropriate technology in combination make a great product, working together for the most optimal form and function to be achieved. AXIOM loudspeaker systems are uniquely designed and engineered entirely in Italy by the AXIOM R&D team and manufactured at the new PROEL production hub in Acquaviva. 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.



## 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 and power amplifiers equipped with the CORE DSP platform.

The PRONET AX software 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.

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

Snapshots of the system can be loaded or saved, including a specific unit's position on the desktop and all the parameters of the whole system.



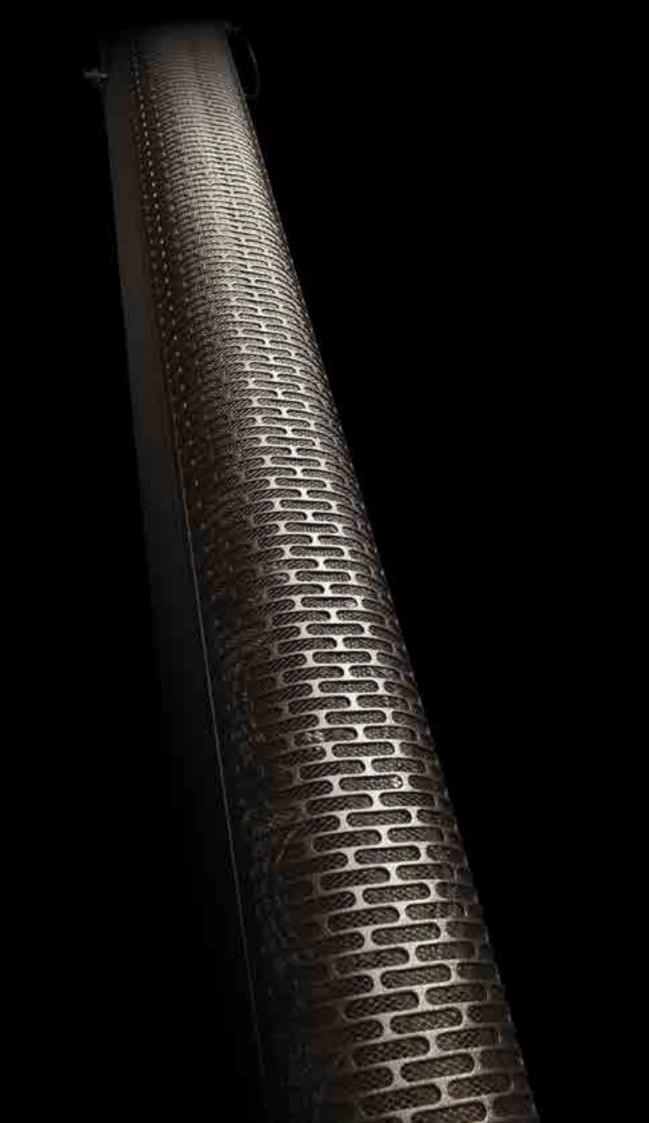


## AX LINE ARRAYS

#### **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 sounding Transmission Line HF projection wave-forming devices
- Front Diffraction Waveguides
- 96KHz / 40 bit floating point CORE processing with PRONET AX remote control
- Digitally controlled Class D amplifier modules 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.







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.

Custom designed Italian-made transducers are use throughout the range, ensuring consistent performance and excellent reliability. Woofers used in AX Series line arrays are Transmission Line back-loaded to minimise box resonances and eliminate 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.

Powered AXIOM line arrays feature digitally controlled Class D amplifier modules 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 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<sup>®</sup> 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 passive column array loudspeaker designed for mobile and permanently installed applications requiring high output from a very discreet and easily transportable physical package. It consists of twelve 3.5" cone transducers arranged in a vertical array, each loaded by a Front Diffraction Waveguide that contributes towards wide horizontal dispersion

The drive units are housed in an extruded aluminium housing designed to provide Transmission Line back-loading, resulting in natural cardioid behaviour.

The AX12C is complemented by the SW2100A powered subwoofer which features a 4000 watt Class D amplifier and DSP module that can power up to four AX12C columns, thereby making up a powerful, wide dispersion sound reinforcement system that is ideally suited to live band or corporate applications. For permanent installations a complete range of mounting hardware is available for suspending, wall mounting, and ground support.

#### AX12CWH • white textured paint



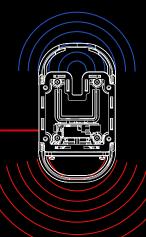






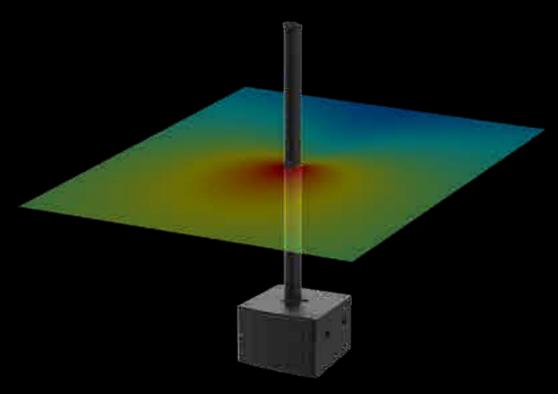
The Transmission Line back-loading technique fundamental to the AX12C and used in other AXIOM line array products solves a problem that can occur in many sound reinforcement situations - a perception of excessive bass and mid-bass frequencies behind the PA, and also on the stage.

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.



#### **AX6C** High Output Column Array

Sharing the same attributes as the larger AX12C column array in a half-height enclosure, the AX6C is designed for portable live band or corporate applications as well as permanent installations. It consists of six 3.5"Transmission Line back loaded cone transducers arranged in a vertical array, each loaded by a Front Diffraction Waveguide that contributes towards wide horizontal dispersion.

It can be combined with AX12C and AX12LF columns in multiple column systems in various configurations to match the physical space available, and can be driven by QC Series amplifiers, or up to eight AX6C modules can be driven by the SW2100A powered subwoofer.

A range of mounting and fixing hardware is available to facilitate many different mounting requirements.

#### AX6CWH • white textured paint





Wall/ceiling/floor bracket



The AX12LF line array is a passive low frequency loudspeaker equipped with twelve 3.5" long-excursion transducers designed to provide extended low frequency response for AX12C and AX6C columns. Wherever an external subwoofer is not needed or cannot be accommodated due to space restrictions, such as in speech applications or corporate events, the AX12LF provides an additional octave of frequency response down to 90Hz in the same width enclosure.

Its common suspension system enables perfect integration with Axiom column array elements, either flown or ground supported.

The AX12LF can be powered using QC Series Class D amplifiers, which provide multiple presets for various combinations using the built-in CORE DSP which can be remotely controlled using PRONET AX software.

#### AX12LFWH • white textured paint





#### **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 and fixed installation applications where a range of audience spaces can be addressed with only one type of enclosure. Two high performance 10" woofers with lightweight cones and aluminium voice coils ensure fast response in the bass and mid frequencies, and 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 waveforming waveguides, deliver detailed and natural high frequencies with excellent projection capabilities.

#### AX2010PWH • white textured paint

#### **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 contains two 10" woofers and two 1.4" HF compression drivers powered by a 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, managed by the intuitive PRONET AX remote 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.

#### AX2010AWH • white textured paint







#### **AX2065P** Dual 6.5" Passive Vertical Line Array

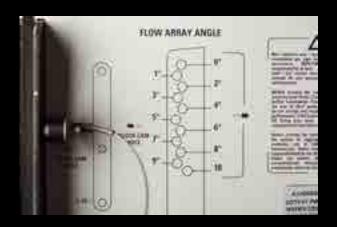
The AX2065P is a compact passive vertical line array element providing superior sound quality and effortless portability, designed for live sound reinforcement in small to medium audience spaces such as corporate events, broadcast studios, and fashion shows. It is also ideal for use in flown or ground-stacked side fill applications, or 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.

#### **AX2065A** Dual 6.5" Powered Vertical Line Array

The AX2065A dual 6.5" powered line array element combines superior sound quality with a high 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 Class D amplifier with digitally-controlled SMPS, providing exceptional dynamics and superior sound definition at all audio frequencies. The power module is extremely compact and lightweight, and is capable of powering an additional passive AX2065P loudspeaker, making very efficient use of mains power. Optimised performance is ensured by 40-bit, 96kHz CORE DSP, and remotely controlled by intuitive PRONET AX software. Integrated rigging hardware is seamlessly compatible with the AX2065P.

#### AX2065PWH • white textured paint

#### AX2065AWH • white textured paint







#### **AX800A** Dual 8" Powered Vertical Line Array

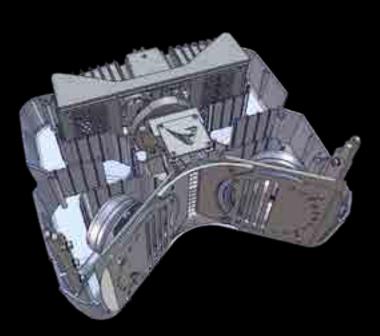
The AX800A defines the standard by which small format compact line array performance can be measured, in portable and fixed sound reinforcement applications where ease of setup and use together with quality sound are critical.

The AX800A is a compact powered line array consisting of two eight-inch low frequency drivers, Transmission Line back-loaded for natural cardioid behaviour and clean mid-bass reproduction, and a 1.4-inch titanium diaphragm compression driver loaded by an acoustic Transmission Line waveguide providing natural sounding high frequencies.

These high grade Italian sourced 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.

#### **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.



## SUBWOOFERS with well defined bass response and excellent

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 insideoutside 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 Manifolded 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.

Manifolded Bandpass technology similarly brings together two concepts: loading the front of two driver cones into a manifold with the advantages of bandpass 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<sup>®</sup> 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** High Output 21" Powered Subwoofer

The SW2100A is a high output powered subwoofer designed to be used with AX12C and AX6C column arrays. 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 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 various combinations of AX12C and AX6C elements.

1000

An integrated metal plate provides a mounting point for AX Series column speakers, and heavy duty wheels enable transportation.

#### SW2100AWH • white textured paint

			 Contract of the local division of the local	
		and the second se	The second second	1000
and the second s				1000
the second s			 	
statements of the local division of the loca				
		the second second		-
and the second se	the second se	terror and the second se	and the second second	-
		and the second		Contra 1
		and the second second second		the second se
		the second s		Terrar 1
statement of the local division of the local		the second second second		
and the second s		THE R. LEWIS CO., LANSING MICH.		
statements in the second second				-
				_
and the second se				
A REAL PROPERTY.				the second s
				Sec. 1
				The state of the s
and the second se				
		and the second se		
State of the local division of the local div				
and the second se				
and the second se				
and the second se				1000
Charles				and the second se
				_







#### **SW121HLP** 21" Horn-loaded Subwoofer

The SW121HLP delivers superior low frequency reproduction 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. The birch ply cabinet is equipped with heavy duty wheels.

#### **SW121HLA** 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. 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.







#### **SW36XFP** 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.

#### SW36XFPWH • white textured paint

#### SW36XFA

#### Dual 18" Powered Manifolded Bandpass Subwoofer

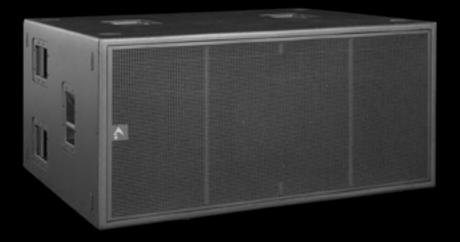
The SW36XFA features an integrated 4000 watt class D amplifier module that provides convenience and simplicity of connection for concert touring applications, and will also benefit larger fixed installations such as dance clubs, sports halls, stadia, and conference rooms. It will deliver high sound pressure level at bass frequencies, with abundant headroom to deliver the fast transient response required for live music performances and electronic music.

Its two custom 18" drivers feature 4"Tetracoil dual voice coils, which are capable of very high excursion to move significant amounts of air. CORE DSP processing ensures that the SW36XFA is capable of perfect signal integrity, dynamic range in excess of 110 dB, and superior sonic performance.

#### SW36XFAWH • white textured paint







#### **SW218P** Dual 18" Manifolded Subwoofer

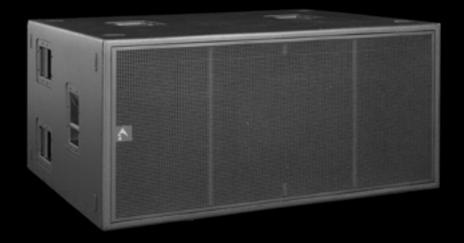
The SW218P is a dual 18" manifolded Transmission Line subwoofer designed for ground stacked sub-bass support of AX2010 line arrays in demanding concert touring applications where high output and good bass definition is required from an easily transportable and road-ready cabinet. It uses two proprietary 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 presure 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. CORE DSP processing ensures that the SW218A is capable of perfect signal integrity, dynamic range in excess of 110 dB, and superior sonic performance.







#### **SW218XP** High Output 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 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 High Output 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.

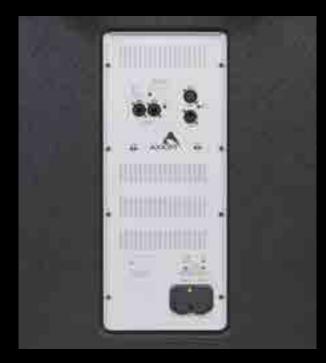






#### **SW1800A** Dual 18" Powered Manifolded Subwoofer

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 AX2065P compact line arrays. 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.

#### SW215FPWH • white textured paint

#### SW215FAWH • white textured paint





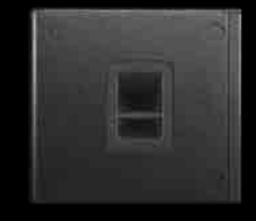
#### **SW18P** 18" Direct Radiating Subwoofer

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 a pole mount socket, stacking feet, flush handles, and heavy duty wheels to enable easy handling and transportation.

#### **SW18A** 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** 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.

#### SW210PWH • white textured paint





# E D 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
- Asymmetric dispersion pattern
- 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 coverage 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 edgewound 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.



# POINT SOURCE



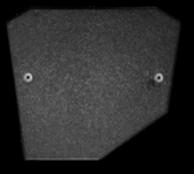
## **ED150P** Passive 15"Two-way Full Range Loudspeaker

The ED150P is a two-way full range enclosure containing a 15" LF drive unit and a 1.4" HF compression driver, providing an extended bass response. It is designed for many stand-alone sound reinforcement applications, although additional subwoofers from the AXIOM range can extend low frequency response. The ED150P 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.

#### ED150PWH • white textured paint

## **ED150A** Powered 15"Two-way Full Range Loudspeaker

The ED150A is a powered version of the ED150P featuring an integrated Class D amplifier module with factory presets provided by the PROEL CORE digital signal processing. It is truly a multi-purpose speaker product, and can be used either standalone or with subwoofers as a front of house loudspeaker, or in nightclubs and bars, theatres, 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 ED150A easy to transport and use in portable situations, while the integrated rigging points enable suspension in permanent installations.









## **ED120P** 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, with or without 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.

#### ED120PWH • white textured paint

## **ED120A** Powered 12"Two-way Full Range Loudspeaker

The ED120A is a powered version of the ED120P featuring an integrated Class D amplifier module with factory presets provided by the PROEL CORE digital signal processing. It is truly a multipurpose 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** 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** 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 underbalcony 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.

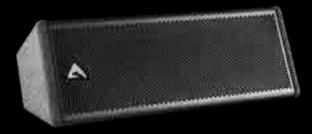
#### ED80PWH • white textured paint













#### **ED25P** 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.

#### ED25PWH • white textured paint

## **ED23P** 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 unobtrusively provide alternate inwards / outwards coverage for both audience and presenters.

#### ED23PWH • white textured paint





# **CX** STAGE MONITORS

CX Series Stage Monitors are amongst the most compact and powerful in their class, designed around a minimal space-saving footprint that makes them unobtrusive on stage. This is achieved by the use of innovative coaxial drive units that help to eliminate the time and phase problems that can occur with discrete non-coincident sources. Constructed with 45° and 55° angles sides, the CX Series monitors also feature integral pole holders to enable use as front of house loudspeakers. The integrated Class D amplifiers and built-in DSP offers factory presets for consistent performance on any concert stage, and delivers top of the range performance, superior sound definition at any audio frequency, and very high dynamic range even at maximum power.

# **KEY FEATURES**

- High output Coaxial Stage Monitors
- 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



## **CX15A** Coaxial Powered Stage Monitor

The CX15A is a high output 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 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.



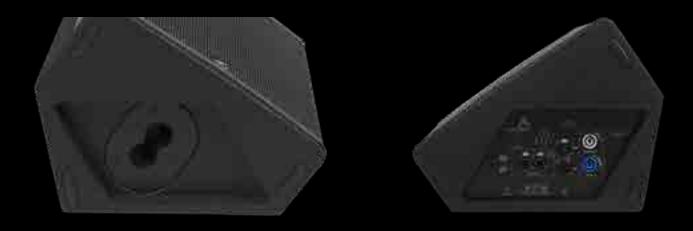


## **CX14A** Coaxial Powered Stage Monitor

The CX14A is a coaxial stage monitor designed specifically for live sound, although the very compact, low-profile enclosure also makes it suitable for theatre and television applications.

The combination of a high-performance coaxial transducer, a carefully designed cabinet, and powerful Class D amplifier together with CORE DSP processing provides very high SPL before feedback and excellent intelligibility even at very high power. The unique 14" LF transducer's coaxial design offers a very stable acoustical pattern over 80° in both the horizontal and vertical axes. The high frequency range is reproduced by a low-distortion compression driver equipped with a 3" aluminium voice coil and polyester/titanium diaphragm.

The special shape of the LF cone allows precise and controlled conical dispersion of 80°. The reduced size and weight of the birch plywood cabinet makes the CX14A one of the most compact and lightweight stage monitors in its category. The 45° and 55° angled sides enable it to be positioned at differing distances from the performers depending on the stage size and type of monitoring needed. A convenient dual-angle pole holder allows the CX14A to be mounted on a standard speaker stand to be used as a multipurpose front of house loudspeaker.



# 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.

## **KEY FEATURES**

- Digitally controlled Class D power amplifiers
- PWM output stages with variable switching frequency
- Very efficient Switch Mode Power Supply
- Extensive protection system
- 96KHz / 40bit floating point CORE processing with PRONET AX remote control
- Aluminum front panel with removable dust filters







**QC4.2** Four Channel DSP Amplifier

#### **QC4.4** Four Channel DSP Amplifier



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.

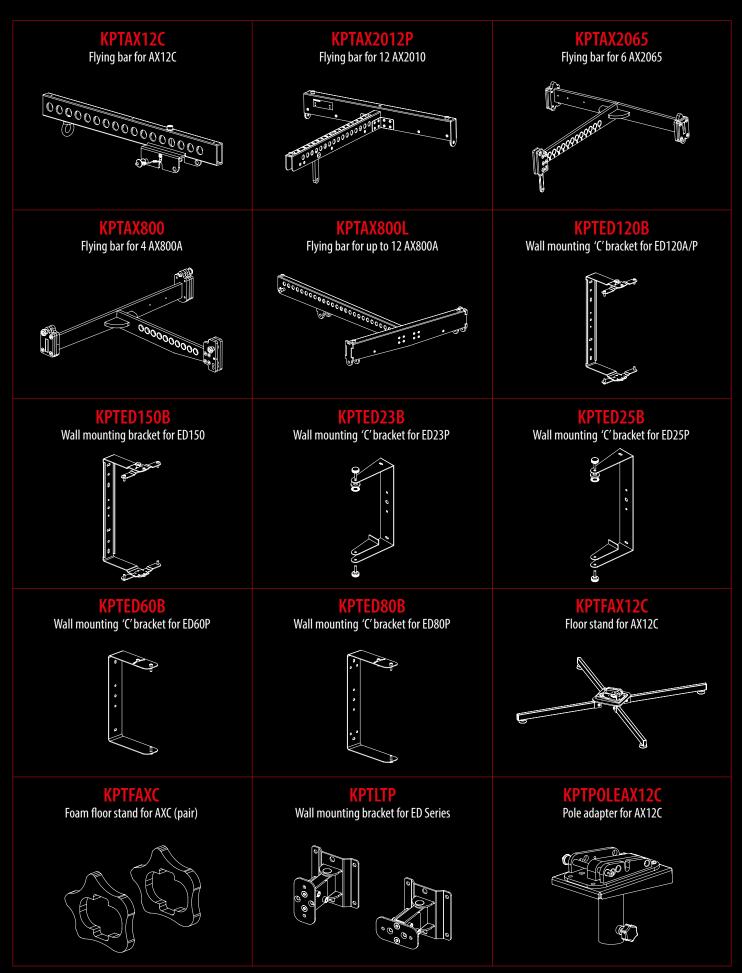
The most powerful in the Series, the QC2.4 is a two channel unit delivering 2000 watts per channel at 4 ohms and featuring PFC (Power Factor Correction), a technology able to guarantee always the highest level of power regardless of any eventual fluctuations of the power supply. QC2.4 is ideal for use 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)



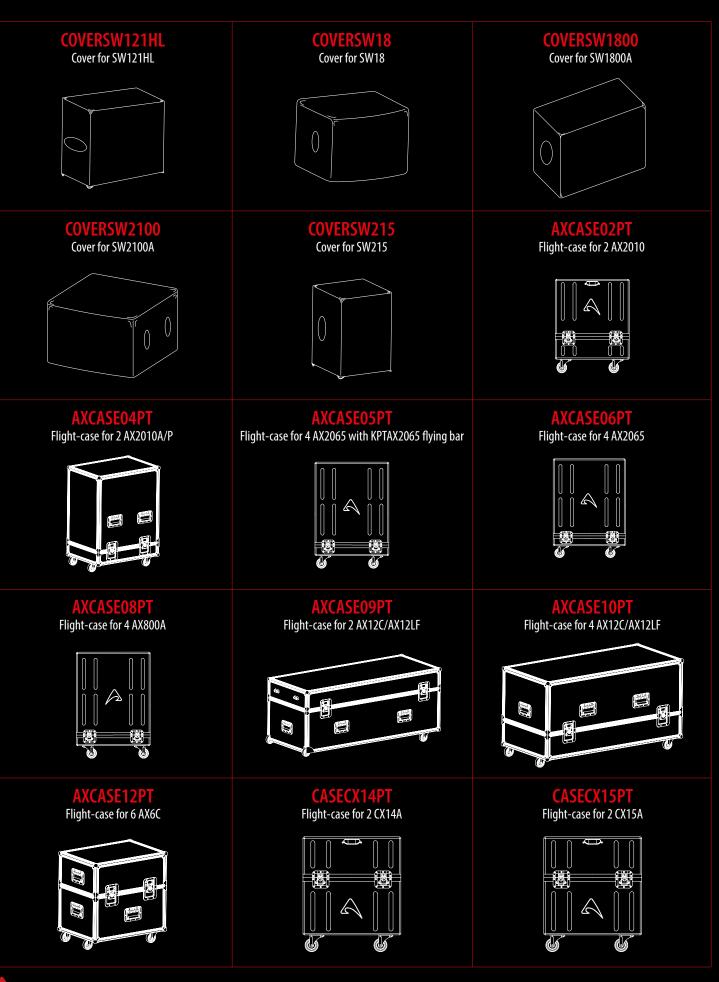


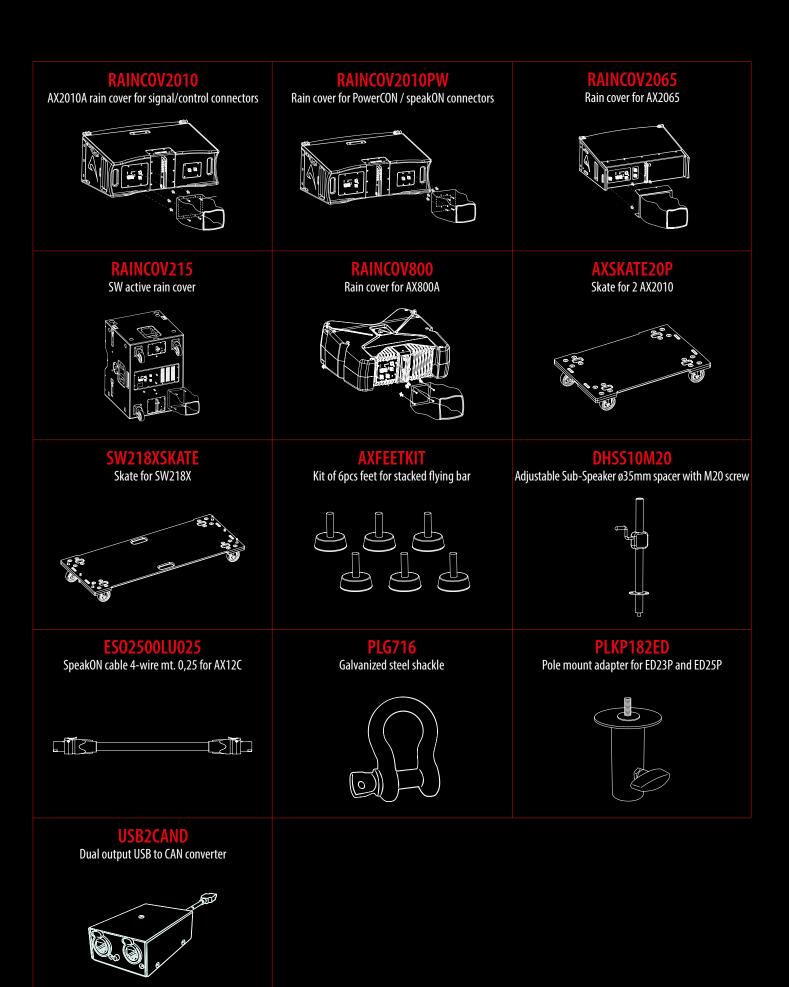
# ACCESSORIES





# ACCESSORIES





# ACCESSORIES

	AX12C	AX6C	AX12LF	AX2010P	AX2010A	AX2065P	AX2065A	AX800A	SW2100A	SW121HLP	SW121HLA	SW36XFP	SW36XFA	SW218P	SW218A	SW218XP	SW218XA	SW1800A
KPTAX12C	•	•	•								l I							
KPTAX2012P				•	•													
KPTAX2065						•	•											
KPTAX800								•										
KPTAX800L								•			l i			l i				
KPTED120B											i i							
KPTED150B											l I							
KPTED23B																		
KPTED25B																		
KPTED60B											i i							
KPTED80B																		
KPTFAX12C	•	•	•								i i							
KPTFAXC	•	•	•															
KPTLTP																		
KPTPOLEAX12C	•	•	•															
KPTSW215						•	•											
KPTSW36XF				•	•							•	•					
KPTWAX12C	•	•	•															
KPTWAX6C		•																
KP010						•	•											
KP2105									•									
KPAX265						•	•											
KPAX8								•										
COVERAX12C	•		•							i	l							
COVERAX6C		•																
COVERCX14											l							
COVERCX15																		
COVERED120										i								
COVERED150																		
COVEREDSW218										i				•	•	•	•	
COVERSW121HL										•	•							
COVERSW18										i								
COVERSW1800																		•
COVERSW2100									•	i		i <b>len</b>		l	í <b>len</b>	i <u> </u>		
COVERSW215																		
AXCASE02PT				•	•													
AXCASE04PT				•	•													
AXCASE05PT						•	•											
AXCASE06PT						•	•											
AXCASE08PT								•										
AXCASE09PT	•		•															
AXCASE10PT	•		•															
AXCASE12PT		•																
CASECX14PT																		
CASECX15PT																		
RAINCOV2010					•													
RAINCOV2010PW				•	•	•												
RAINCOV2065							•											
RAINCOV215										•	•		•		•		•	•
RAINCOV800								•										
AXSKATE20P				•	•													
SW218XSKATE																•	•	
AXFEETKIT				•	•	•	•	•				•	•					
DHSS10M20						•	•	•										
ES02500LU025	•	•	•															
PLG716	•	•	•	•	•	•	•	•				•	•					
PLKP182ED																		
USB2CAND					•		•	•	•		•		•		•		•	•

SW215P	SW215FP	SW215A	SW215FA	SW18P	SW18A	ED150P	ED150A	ED120P	ED120A	ED80P	ED60P	ED25P	ED23P	CX15A	CX14A	QC4.2	QC4.4	QC2.4	
																			KPTAX12C
																			KPTAX2012P
																			KPTAX2065
																			KPTAX800
																			KPTAX800L
								•	•										KPTED120B
						•	•												KPTED150B
													•						KPTED23B
												•							KPTED25B
											•								KPTED60B
										•									KPTED80B
																			KPTFAX12C
											_								KPTFAXC KPTLTP
								•		•	•	•	•						KPTLIP KPTPOLEAX12C
	•		•																KPTFOLEAN12C
																			KPTSW215
																			KPTWAX12C
																			KPTWAX12C
																			KP010
				•	•														KP210S
																			KPAX265
																			KPAX8
																			COVERAX12C
																			COVERAX6C
															•				COVERCX14
														•					COVERCX15
								•	•										COVERED120
						•	•												COVERED150
																			COVEREDSW218
																			COVERSW121HL
				•	•														COVERSW18
																			COVERSW1800
																			COVERSW2100
•	•	•	•																COVERSW215
																			AXCASE02PT
																			AXCASE04PT
																			AXCASE05PT
																			AXCASE06PT AXCASE08PT
																			AXCASE08PT
																			AXCASE09PT
																			AXCASE1011
															•				CASECX14PT
														•					CASECX15PT
																			RAINCOV2010
																			RAINCOV2010PW
																			RAINCOV2065
		•	•		•														RAINCOV215
																			RAINCOV800
																			AXSKATE20P
																			SW218XSKATE
	•		•																AXFEETKIT
																			DHSS10M20
																			ES02500LU025
	•		•																PLG716
												•	•						PLKP182ED
		•	•		•				•					•		•	•	•	USB2CAND

# WHITE COLOUR OPTION

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 AX12LFWH AX2010AWH AX2010PWH AX2065AWH AX2065PWH AX6CWH

#### SW Series

SW210PWH SW215FAWH SW215FPWH SW36XFAWH SW36XFPWH ED120PWH ED150PWH ED23PWH ED25PWH ED60PWH ED80PWH

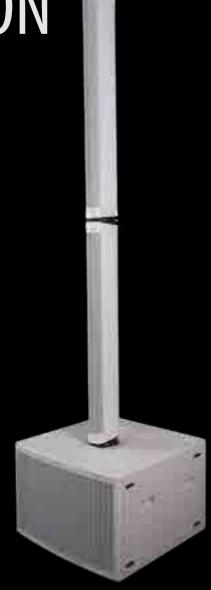
**ED Series** 

#### FLYING BAR for AX Series

KPTAX2012PWH KPTAX2065WH KPTSW215WH KPTSW36XFWH

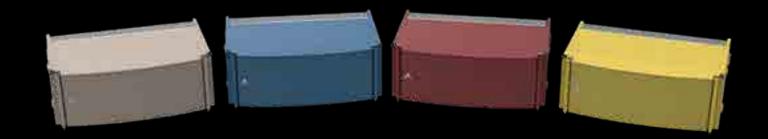
#### WALL BRACKET for ED Series

KPTED120WH KPTED150WH KPTED23WH KPTED25WH KPTED60WH KPTED80WH



# **COLOUR CUSTOMISATION**

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.

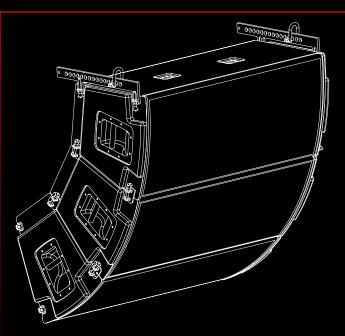


# **CUSTOMISED SOLUTIONS**

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.

#### **CUSTOMISED RIGGING SOLUTIONS**





# SPECIFIC WEATHER PROTECTION





#### **CUSTOMISED CONNECTIONS**



AXIOM products are manufactured entirely in-house at PROEL's ultra-modern factory in Acquaviva, 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

	Configuration	Frequency Response	Nominal Impedance	Sensitivity	Max Peak SPL	Power Handling / Power Output
AX12C	12 x 3.5″	180 Hz – 16 kHz (±3dB) (processed)	16 Ω	105 dB SPL @ 1m	130 dB SPL @ 1m	360 W (AES) 720 W (prgm)
AX6C	6 x 3.5″	200 Hz – 16 kHz (±3dB) (processed)	32 Ω	102 dB SPL @ 1m	124 dB SPL @ 1m	180 W (AES) 360 W (prgm)
AX12LF	12 x 3.5″	90 Hz – 200 Hz (±3dB) (processed)	8 Ω	99 dB SPL @ 1m	124 dB SPL @ 1m	320 W (AES) 640 W (prgm)
AX2010P	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)
AX2010A	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
AX2065P	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)
AX2065A	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
AX800A	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
SW2100A	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
SW121HLP	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)
SW121HLA	1 x 21" (5.3″VC)	31 Hz – 80 Hz (±3dB) (processed)	N/A	N/A	141 dB SPL @ 1m	4000 W Class D
SW36XFP	2 x 18″ (4″VC) Tetracoil Technology	36 Hz - 100 Hz (±3dB) (processed)	$8 \Omega + 8 \Omega$	N/A	143 dB SPL @ 1m	1800 W + 1800 W (AES) 3600 W + 3600 W (prgm)
SW36XFA	2 x 18" (4"VC) Tetracoil Technology	36 Hz – 100 Hz (±3dB) (processed)	N/A	N/A	143 dB SPL @ 1m	2000 W + 2000 W Class D
SW218P	2 x 18" (4"VC)	30 Hz – 92 Hz (±3dB) (processed)	$4 \Omega + 4 \Omega$	101 dB SPL @ 1m	141 dB SPL @ 1m	800 W + 800 W (AES) 1600 W + 1600 W (prgm)
SW218A	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
SW218XP	2 x 18" (4"VC) Tetracoil Technology	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)
SW218XA	2 x 18" (4"VC) Tetracoil Technology	30 Hz - 92 Hz (±3dB) (processed)	N/A	N/A	143 dB SPL @ 1m	2000 W + 2000 W Class D
SW1800A	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

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™	AX120
100° Horizontal	107 x 626 x 193 4.2" x 24.6" x 7.6"	6.6 kg / 13.8 lbs	Aluminium extruded	Black paint White paint	Integrated system Optional brackets	speakON™	AX60
360° Horizontal	107 x 1166 x 193 4.2" x 45.9" x 7.6"	13.2 kg / 29 lbs	Aluminium extruded	Black paint White paint	Integrated system Optional brackets	speakON™	AX12LF
110°Hx 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™	AX2010P
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	AX2010A
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™	AX2065P
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	AX2065A
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	AX800A
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	SW2100A
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™	SW121HLP
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	SW121HLA
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™	SW36XFP
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	SW36XFA
N/A	1215 x 590 x 950 47.9″ x 23.2″ 37.4″	98 kg / 21.6 lbs	15 mm phenolic birch plywood	Black textured paint	N/A	speakON™	SW218P
N/A	1215 x 590 x 950 47.9″ x 23.2″ 37.4″	101.7 kg / 223.7 lbs	15 mm phenolic birch plywood	Black textured paint	N/A	powerCON™TRUE1, XLR, etherCON™ RJ45	SW2184
N/A	1215 x 590 x 950 47.9″ x 23.2″ 37.4″	114 kg / 251.3 lbs	15 mm phenolic birch plywood	Black textured paint	N/A	speakON™	SW218XP
N/A	1215 x 590 x 950 47.9" x 23.2" 37.4"	121.2 kg / 267.2 lbs	15 mm phenolic birch plywood	Black textured paint	N/A	powerCON™TRUE1, XLR, etherCON™ RJ45	SW218XA
N/A	570 x 960 x 880 22.4" x 13.8" x 34.6"	70 kg / 154.3 lbs	15 mm phenolic birch plywood	Black textured paint	N/A	powerCON™TRUE1, XLR, etherCON™ RJ45	SW1800A

	Configuration	Frequency Response	Nominal Impedance	Sensitivity	Max Peak SPL	Power Handling / Power Output
SW215P	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)
SW215FP	2 x 15" (3"VC)	39 Hz - 120 Hz (±3dB) (processed)	$8 \Omega + 8 \Omega$	102 dB SPL @ 1m	139 dB SPL @ 1m	700 W + 700 W (AES) 900 W + 900 W (prgm)
SW215A	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
SW215FA	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
SW18P	1 x 18" (4"VC)	36 Hz - 100 Hz (±3dB) (processed)	8Ω	98 dB SPL @ 1m	132 dB SPL @ 1m	800 W (AES) 1200 W (prgm)
SW18A	1 x 18" (4"VC)	36 Hz – 100 Hz (-6dB) (processed)	N/A	N/A	132 dB SPL @ 1m	2000 W Class D
SW210P	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)
ED150P	1 x 15″ (3″VC) LF 1 x 1.4″ (2.4″VC) HF	50 Hz - 17 kHz (-6dB)	8Ω	97 dB SPL @ 1m	128 dB SPL @ 1m	680 W (AES) 1360 W (prgm)
ED150A	1 x 15″ (3″VC) LF 1 x 1.4″ (2.4″VC) HF	50 Hz – 17 kHz (–6dB) (processed)	N/A	N/A	128 dB SPL @ 1m	900 W + 300 W Class D
ED120P	1 x 12″ (3″VC) LF 1 x 1.4″ (2.4″VC) HF	65 Hz - 17 kHz (-6dB)	8Ω	97 dB SPL @ 1m	128 dB SPL @ 1m	680 W (AES) 1360 W (prgm)
ED120A	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
ED80P	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)
ED60P	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)
ED25P	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)
ED23P	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)
CX15A	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
CX14A	1 x 14" (3"VC) LF 1 x 2" (3"VC) HF	70 Hz – 18 kHz (±3dB)	N/A	N/A	131 dB SPL @ 1m	900 W + 300 W Class D

Coverage Angle @ -6dB points	Dimensions (WxHxD) mm / ins	Net Weight	Enclosure	Finish	Rigging	Connectors	
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™	SW215P
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™	SW215FF
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™, XLR, etherCON™ RJ45	SW215A
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™, XLR, etherCON™ RJ45	SW215FA
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™	SW18P
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	SW18A
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™	SW210P
60° to 100° H x 60° V	450 x 765 x 400 17.7" x 30.1" x 15.7"	25 kg / 55.1 lbs	15 mm phenolic birch plywood	Black textured paint White textured paint	Rigging points Optional brackets	speakON™	ED150P
60° to 100° H x 60° V	450 x 765 x 400 17.7" x 30.1" x 15.7"	26 kg / 57.3 lbs	15 mm phenolic birch plywood	Black textured paint	Rigging points Optional brackets	powerCON™ NAC3MP, XLR, etherCON™ RJ45	ED150A
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™	ED120P
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	ED120A
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™	ED80P
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™	ED60P
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™	ED25P
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™	ED23P
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	CX15A
80° H x 80° V	507 x 316 x 403 20" x 12.4" x 15.8"	16 kg / 35.3 lbs	15 mm phenolic birch plywood	Black textured paint	N/A	powerCON™, XLR, etherCON™ RJ45	CX14A









#### **AXIOM** is a brand of

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