



KEY FEATURES

- Compact powered subwoofer
- 96kHz / 40 bit floating point CORE processing with PRONET remote control
- Digitally controlled Class D amplifier module with SMPS
- 18" woofer, 4" voice coil
- Water repellant cone
- Heavy duty wheels
- Pole mount socket

APPLICATIONS

- Corporate and A/V
- Live music venues
- Nightclubs and bars
- House of Worship

TECHNICAL SPECIFICATIONS

SYSTEM

System's Acoustic Principle	Direct radiation, vented
Frequency Response (-6dB)	36 Hz – 100 Hz (processed)
Maximum (peak) Output	132 dB SPL @ 1m

TRANSDUCERS

Type	One 18" (457mm) LF driver, 4" (101.6mm) voice coil, 8Ω
Cone	High stiffness, water repellent, glass fibre reinforced diaphragm
Voice Coil Type	Flux Demodulating Ring
Suspension	Double Centering Spider

ELECTRICAL

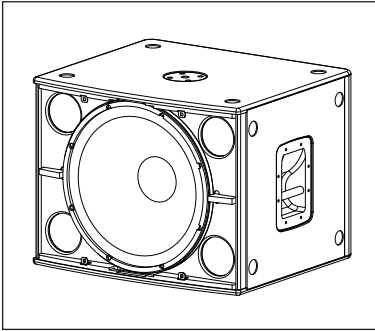
Input Impedance	20 kΩ balanced, 10 kΩ unbalanced
Input Sensitivity	+4dBu / 1.25 V
Signal processing	CORE processing, 96kHz / 40bit floating point SHARC DSP, 24 bit AD/DA converters
Direct access Controls	4 Presets (STANDARD/INFRASUB/CARDIOID/USER), Network Termination, GND Link
Remote Controls	PRONET control software
Network Protocol	CANBUS
Amplifier Type	Class D with SMPS, Variable Switching Frequency
Output Power	2000W
Mains Voltage Range (Vac)	230V ±15% - 115 ±15% 50/60Hz (internally selectable)
IN / OUT Connectors	Neutrik XLR-M / XLR-F
IN / OUT Network Connectors	ETHERCON®(NE8FAV)
Mains Input Connector	PowerCON® TRUE1 (NAC3MPX)
Mains Link Connector	PowerCON® TRUE1 (NAC3FPX)
Cooling	Variable speed DC fan

ENCLOSURE & CONSTRUCTION

Dimensions (W x H x D)	650 mm (25.6") x 500 mm (19.7") x 564 mm (22.2") / 673 mm (26.5") including wheels
Enclosure material	15mm, reinforced phenolic birch
Paint	High resistance, black water based paint
Wheels	4 x 100mm Polyurethane Wheels
Net Weight	42.5 kg (93.7 lbs)



DESCRIPTION



The SW18A is a compact and powerful subwoofer that provides extended low frequency response for specific models in the ED series of high performance point source loudspeakers.

The 18" low frequency driver is a high power transducer equipped with a moisture resistant glass fibre reinforced cone. The double centering spider ensures that the 4" voice coil always remains centered in the magnetic gap even under high excursion conditions.

The 15mm phenolic birch plywood cabinet is provided with a 35mm pole mount socket to allow two-way ED series loudspeakers to be mounted above on standard speaker poles. Recessed handles are provided for easy lifting and handling, and the included polyurethane wheels aid transportation, while stacking feet and matching recesses enable secure ground stacks.

SYSTEM PROCESSING

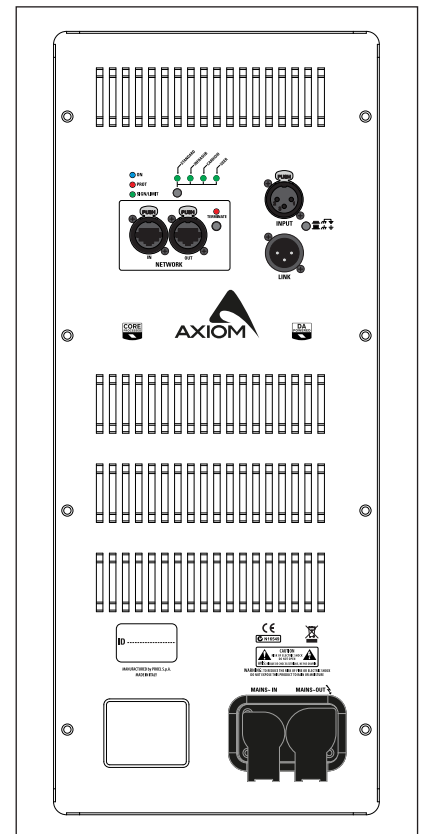
The system processing is based on the CORE DSP platform designed by the PROEL R&D Laboratories using one of the most advanced SHARC DSP for audio application. It features 40bit, 96kHz floating point resolution and top quality 24bit AD/DA converters for perfect signal integrity, dynamic range in excess of 110dB, and superior sonic performance. Thanks to its massive processing power, the CORE platform is capable of providing the most sophisticated algorithms for speaker processing, together with remote control and networking capability.

The PRONET control software, working on a solid and reliable CANBUS based network protocol, provides an intuitive interface for the remote control of the whole system, with the possibility of EQing, delaying, managing the protection functions, and monitoring the status of the amplifier.

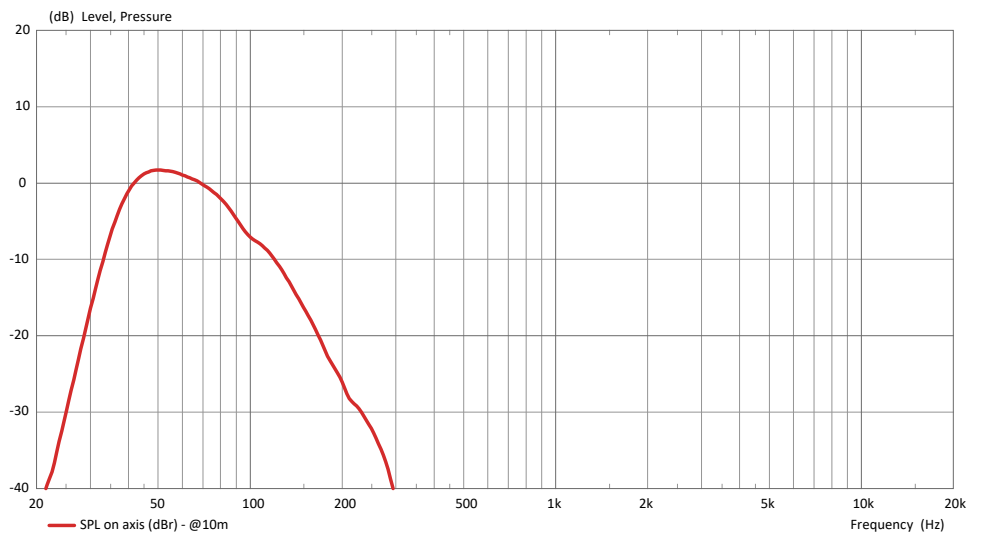
POWER AMPLIFIER

The SW18A is powered by a DA SERIES digital power module. DA SERIES is a new generation of CLASS D power amplifiers with digitally-controlled SMPS. The innovative technology used for these amplifiers (including also the use of a variable switching frequency) offers top of the range performance, such as superior sound definition at any audio frequency, very high dynamics also for low level signals and very low distortion even at the maximum power. The superior sound quality can be compared with top-of-the-range AB-class analog systems, while the DA modules feature a higher dynamics, very compact size and light weight, and efficiency above 90%.

The DA module employed for powering the SW18A delivers in an ultra-compact package power of 2000W to the LF driver. Such a large reserve of power means that the amplifier can handle very high voltage peaks, resulting in an impressive dynamic performance.



SW18A frequency response



ENGINEERING DRAWING

