



### **KEY FEATURES**

- Band-Pass/Bass-Reflex Active Subwoofer
- Single 21" Neodymium woofer with 4" ISV voice coil
- Water repellent cone
- Very compact enclosure
- Very good output-to-weight ratio
- 4000 Watt Class D amplifier with PFC Switch Mode Power Supply
- 40 bit floating point CORE processing
- Optimized presets for use in combination with AX12C line array modules
- Fully networkable with PRONET AX remote control software
- 18mm birch plywood enclosure
- Heavy duty castors

## **APPLICATIONS**

- Live sound reinforcement
- Theatre
- Corporate & A/V
- Live music venues
- House of Worship
- Leisure and Fitness
- Nightclubs and Bars

# **TECHNICAL SPECIFICATIONS**

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|-------------------------------------|---|
| SYSTEM                              |   |
| System's Acoustic Principle         | Band-pass / bass-reflex                                       |
| Frequency Response (-6dB)           | 34 Hz - 180 Hz (Processed)                                    |
| Maximum (peak) SPL                  | 138dB SPL @ 1m  |
| TRANSDUCERS                         |   |
| Туре                                | 21" Neodymium magnet woofer, 4" (100mm) VC                    |
| Cone                                | High stiffness (Complex Composite), water repellent           |
| Voice Coil Type                     | Interleaved Sandwich Voice coil (ISV)                         |
| Suspension                          | Triple-roll   |
| ELECTRICAL                          |   |
| Input Impedance                     | 20 k $\Omega$ balanced, 10 k $\Omega$ unbalanced              |
| Input Sensitivity                   | +4dBu / 1.25 V  |
| Signal Processing                   | CORE2 processing, 40bit floating point SHARC DSP, 24 bit AD/  |
|                                     | DA converters   |
| Direct access Controls              | 4 Presets (2 x AX12C / 4 x AX12C / 1 x AX12C / User), Network |
|                                     | Termination, GND Link   |
| Remote Controls                     | PRONET AX control software                                    |
| Network protocol                    | CANBUS  |
| Amplifier Type                      | Class D with SMPS, Variable Switching Frequency               |
| Output Power                        | 2000W + 2000W (Out1: SW2100 - Out2: AX12C or other            |
|                                     | AXIOM loudspeakers)   |
| Mains Voltage Range (Vac)           | 90 - 260V 50/60Hz   |
| IN / OUT Connectors                 | Neutrik XLR-M / XLR-F   |
| IN / OUT Network Connectors         | ETHERCON®(NE8FAV)   |
| Mains Input Connector               | PowerCON <sup>®</sup> TRUE1 (NAC3MPX)                         |
| Mains Link Connector                | PowerCON <sup>®</sup> TRUE1 (NAC3FPX)                         |
| <b>ENCLOSURE &amp; CONSTRUCTION</b> |   |
|                                     |   |

| Dimensions (W x H x D) | 760 mm (29.9") x 511 mm (20.1") x 770 mm (30.3") |
|------------------------|--|
| Depth Including Wheels | 881 mm (34.6″)                                   |
| Enclosure Material     | 18mm, reinforced phenolic birch                  |
| Enclosure Finish       | High resistance, black water based paint         |
| Transport              | 4 x heavy duty 100mm (4") castors, 4 handles     |
| Net Weight             | 61 Kg (134.2 lbs)                                |





## DESCRIPTION

The SW2100AV2 is a very compact Band-Pass/Bass-Reflex subwoofer providing high output and extended low frequency response. It represents the evolution of SW2100A, with which it maintains full electroacoustic and mechanical compatibility.

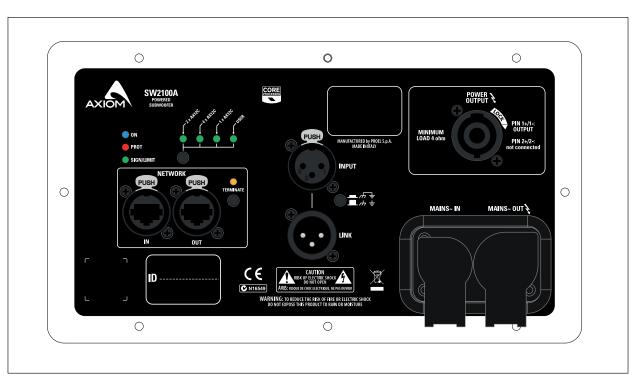
SW2100AV2 is equipped with a single 21" neodymium transducer with a 4" ISV voice coil, large displacement suspension system, and composite reinforced, water repellent cone, able to provide clean and undistorted LF reproduction at very high SPL.

The system processing is based on the CORE2 DSP platform designed by the PROEL R&D Laboratories using one of the most advanced SHARC DSP for audio applications. It features 40bit floating point resolution and top-quality 24bit AD/DA converters, for a perfect signal integrity, dynamic range in excess of 110dB, and superior sonic performance. Thanks to its massive processing power, the CORE2 platform is capable of providing the most sophisticated algorithms for speaker processing, together with remote control and networking capability.

The PRONET AX 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.

The SW2100AV2 is powered by a new generation of CLASS D power amplifiers with digitally-controlled SMPS and latest generation single-stage PFC. The innovative technology used for these amplifiers offers performances at the top of the range, such as a 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 SW2100AV2 power modules feature a higher dynamics, very compact size and light weight and efficiency above 90%.

The power module employed for powering the SW2100AV2 features also PFC (Power Factor Correction), a technology able to guarantee always the highest level of power regardless of any eventual fluctuations of the power supply. It delivers in an ultra-compact package 2000W from each of its two channels: one channel is used to drive the 21" woofer, the other, through an output SPEAKON connector, can power AX12C line array modules or other AXIOM speakers.





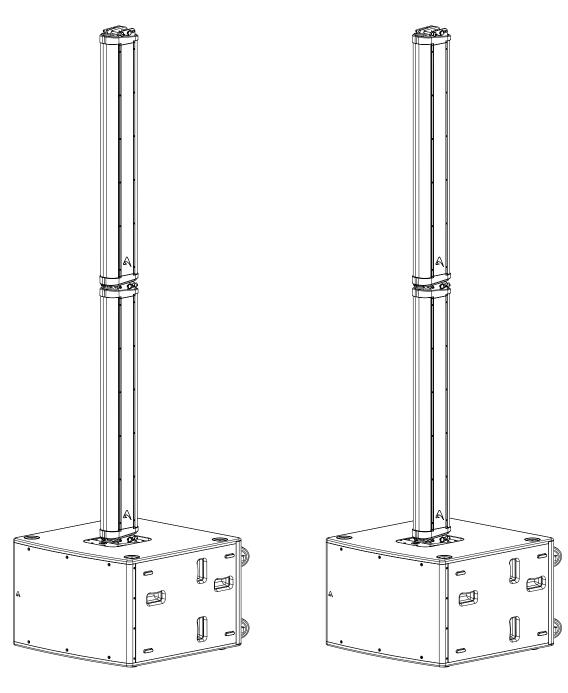


#### THE SYSTEM

The SW2100AV2 has been mainly designed to provide the optimal low frequency extension to the AX12C line array module. The builtin power module can provide 2000W to power up to four AX12C line array modules connected to the output SPEAKON. The builtin CORE2 DSP provides 4 presets for different combinations: 2, 4 or 1 columns plus 1 user preset (additional presets for processing other AXIOM speakers are also available).

The SW2100AV2 features on the top panel a special metal plate and it comes with a dedicated aluminium bracket for fast coupling with the AX12C's rigging hardware. Using this simple system, up to two AX12C modules can be easily installed on an SW2100AV2.

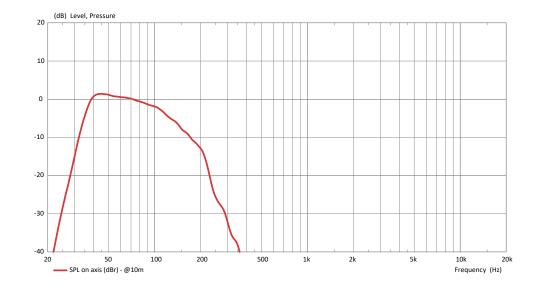
The standard system, composed of four AX12C line array modules and two SW2100AV2 subwoofers, features 8000W of total power and a line-array dispersion pattern, making it the perfect solution for high-performance portable sound reinforcement applications.







# SW2100AV2 frequency response



# **ENGINEERING DRAWING**

