SW215AV2

Dual 15" (380mm), Very High Output, Manifolded Band Pass, Powered, CORE Processed, Subwoofer System

KEY FEATURES

- Very High Output
- Compact size for a very good output-to-weight ratio
- Manifolded Band Pass configuration for a high output in a compact size
- High-strength, water repellent cones
- Long-excursion split coil for extended linear response
- 40 bit floating point CORE2 processing with PRONET AX remote control
- Digitally controlled Class D amplifier module with SMPS and PFC

APPLICATIONS

The SW215AV2 subwoofer is designed to deliver high quality low frequency reproduction where very high output is a key requirement, together with well defined deep bass response and fast transient response. Its compact size and light weight make it suitable for several different uses, ranging from touring applications to fixed installations and high-level dance clubs.

SW215AV2 represents the evolution of SW215AV2, with which it maintains full electroacoustic and mechanical compatibility.

TECHNICAL SPECIFICATIONS

SYSTEM	
System's Acoustic Principle	Manifolded Band Pass
Frequency Response (±3dB)	39 Hz – 100 Hz (Processed)
Maximum Peak SPL @ 1m	139 dB
TRANSDUCERS	
Type	Two 15" (380mm), 3" (75mm) VC
Cone	High stiffness, water repellent
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	CORE2 processing, 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 AX control software
Network protocol	CANBUS
Amplifier Type	Class D with SMPS and PFC
Output Power	1400W +1400W
Mains Voltage Range (Vac)	100 - 240 V~ ±10% 50/60 Hz
IN / OUT Connectors	Neutrik XLR-M / XLR-F
IN / OUT Network Connectors	ETHERCON®(NE8FAV)
Mains Connector	PowerCon® (NAC3MPA)
Cooling	Variable speed DC fan
ENCLOSURE & CONSTRUCTION	
Physical Dimensions	
W x H x D	571 mm (22.48") x 800 mm (31.50") x 582 mm (22.91")
Depth Including Wheels	710 mm (27.95")
Enclosure Material	15mm, reinforced phenolic birch
Paint	High resistance, water based paint
Suspension system (SW215FA)	
Side Suspension	High Strength Steel with ¼ Fast Pin
Back Suspension	High Strength Steel with ¼ Fast Pin
Wheels	4 heavy-load 100 mm ø
Net Weight	SW215AV2: 64.5 Kg (142.20 lbs.) - SW215FAV2: 68.5 Kg (151 lbs.)

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DESCRIPTION

The SW215AV2 is a very high quality powered subwoofer system featuring some of the most advanced technologies for low frequency reproduction. Its unique and innovative design is based on a configuration that can be defined as Manifolded Band Pass.

It uses manifolding of the front side of the cones to maximize the mutual coupling between the two drivers. This innovative configuration does not use any large resonant cavity to load the speaker, but very compact cavities in order to obtain advantages in terms of definition, both at the lowest end and the upper bass.

TRANSDUCERS

The SW215AV2 subwoofer system is equipped with two high power 15" (380mm) transducers capable of long excursion (up to 33mm peak-to-peak), controlled by high stiffness Double Silicon Spider as centering suspension and by heavy duty surround. The motor structure features high strength (BL^2/Re) with optimized symmetry and excursion controlled by Aluminum Demodulating Ring.

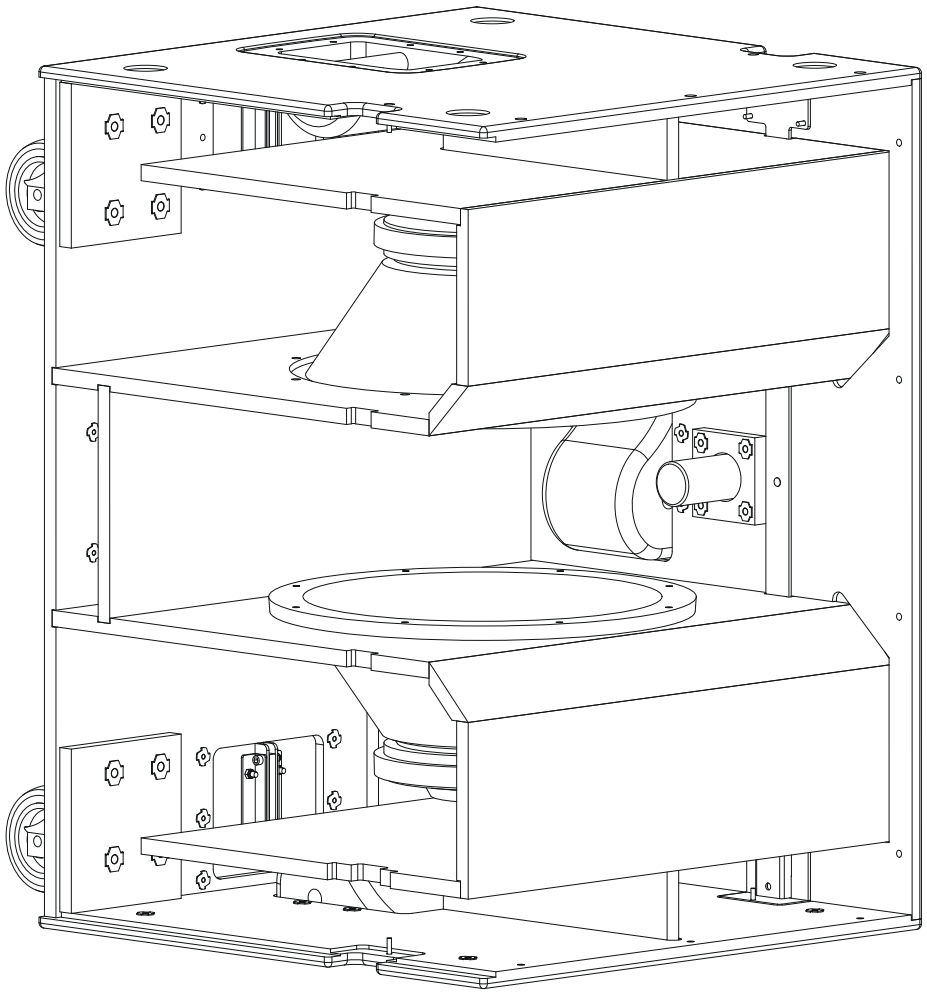
The robust copper 75mm (3") voice coil is wounded in two different layers both outside and inside the coil support, then doubling the coil surface exposed to air cooling and consequently improving the long term thermal capacity of the loudspeaker.

Cones are made of very high-stiffness reinforced paper, featuring also invisible water repellent treatment.

PERFORMANCES

The SW215AV2 represents an innovative subwoofer design that features unprecedented performances in terms of low frequency definition and "punchy" feeling in the upper bass range.

The combination of accuracy in acoustic transient response together with the use of latest technology in transducers linearity, signal processing and power amplifiers allows the SW215AV2 to deliver unprecedented low frequency reproduction quality with solid deep end, together with very fast and accurate bass response.



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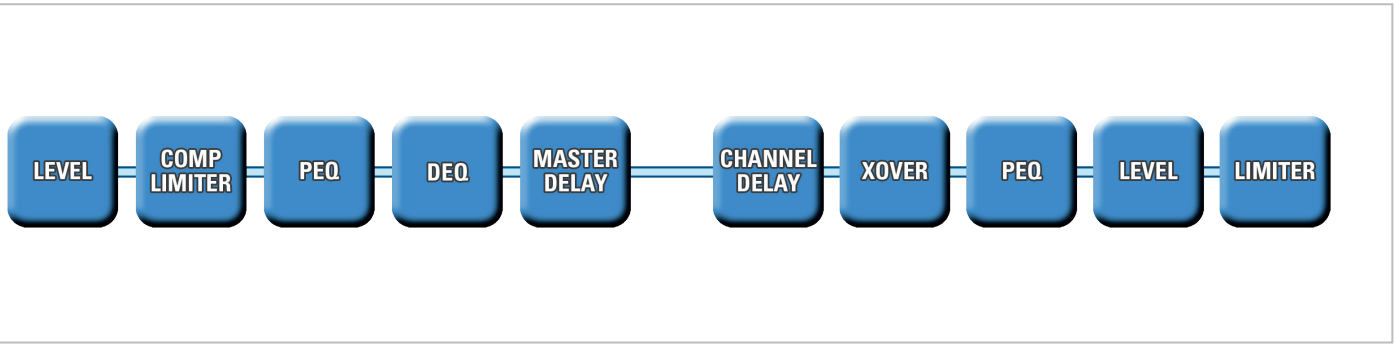
SIGNAL PROCESSING and POWER AMPLIFIERS



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 application. It features 40bit floating point resolution and top-quality 24bit AD/DA converters, for a perfect signal integrity, a dynamic range in excess of 110dB and a 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, increasing the protections and monitoring the status of the amplifier.

The SW215AV2 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 SW215AV2 power modules feature a higher dynamics, very compact size and light weight and efficiency above 90%.

The power module employed for powering the SW215AV2 delivers in an ultra-compact package a total power of 2800W, 1400W for each of the two woofers. Such a large reserve of power means that the amplifier can handle very high voltage peaks, resulting in an impressive dynamic performance.

HARDWARE

The SW215AV2 is available in two versions, with (code SW215FAV2) or without (code SW215AV2) the flying hardware.

In the SW215FAV2 model the built-in suspension system allows one or more sub-woofers to be flown together with the AX2065 vertical array module. The flying system is extremely simple to use and a complete array can be flown in a flash by just a couple of people.

The SW215AV2 offers a cost effective solution for all applications where flying the sub-woofers in not needed.

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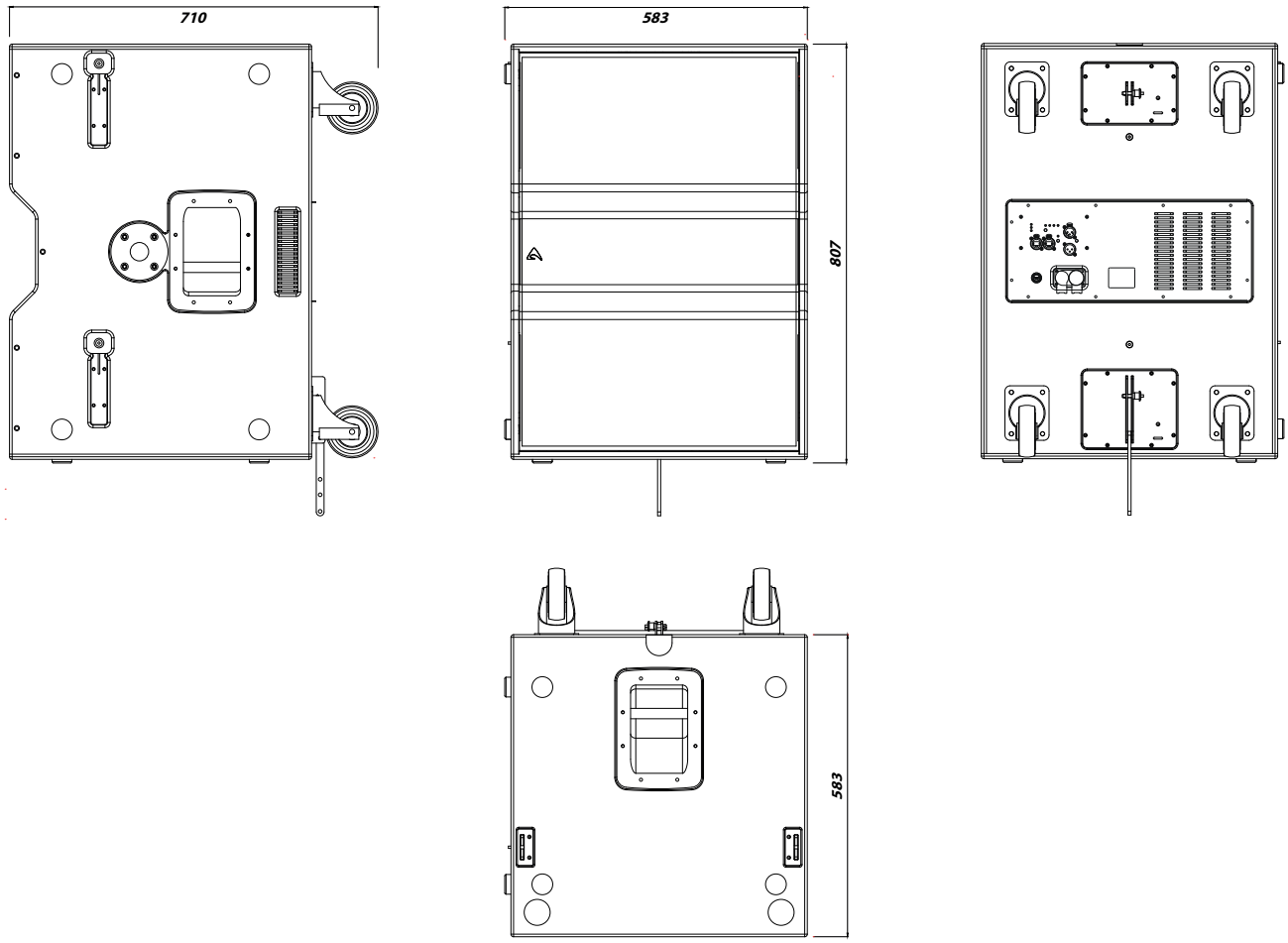
PHYSICAL DIMENSIONS



POWER MODULE CONTROL & CONNECTION PANEL