



KEY FEATURES

- Very High Output
- Compact size for a very good output-to-weight ratio
- Manifolded Transmission Line configuration for very fast transient response
- High-strength, water repellent, glass fiber reinforced cones
- Long-excursion split coil for extended linear response

APPLICATIONS

The SW218P 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.

TECHNICAL SPECIFICATIONS

SYSTEM

System's Acoustic Principle	Manifolded Transmission Line
Frequency Response (± 3 dB)	30 Hz – 92 Hz (Processed)
Frequency Range (± 10 dB)	27 Hz – 300 Hz unprocessed
Nominal Impedance	4 Ω + 4 Ω
Minimum Impedance	3.2 Ω + 3.2 Ω @ 36Hz
Sensitivity (1.41V @ 1m, 2Pi)	101dB (averaged from 40 to 100Hz)
Maximum Peak SPL @ 1m	141 dB

TRANSDUCERS

Type	Two 18" (460mm), 4" (100mm) VC
Cone	High stiffness, water repellent, glass fiber reinforced
Voice Coil Type	Flux Demodulating Ring
Suspension	Double Centering Spider

INPUT CONNECTIONS

Connector Type	Neutrik® Speakon® NL4 x 2
Input Wiring	LF1 = Pin 1+/-; LF2 = Pin 2+/-

POWER HANDLING

Continuous AES Pink Noise Power	800W + 800W
Program Power	1200W + 1200W
Peak Power	2400W + 2400W
Power Compression	
@ -10dB Power (180W + 180W)	0.8dB
@ -3dB Power (900W + 900W)	1.5dB
@ 0dB Power (1800W + 1800W)	2.7dB

ENCLOSURE & CONSTRUCTION

Physical Dimensions

W x H x D	1215 mm (47.87") x 590 mm (23.24") x 950 mm (37.43")
Depth Including Wheels	1050 mm (41.37")
Enclosure Material	15mm, reinforced phenolic birch
Paint	High resistance, water based paint
Wheels	4 heavy-load 100 mm ϕ
Net Weight	98 Kg (216 lbs.)



DESCRIPTION

The SW218P is a very high quality 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 Transmission Line.

It uses manifolding of the front side of the cones to maximize the mutual coupling between the two drivers, while loading the back of the cone with a large-size transmission line that has the function to create a transmission path from the back of the transducers to the front. This innovative configuration does not use any large resonant cavity to load the speaker in order to get the lower octave and this reduces significantly pressure decay time inside the enclosure, with large advantages in terms of definition both at the lowest end and the upper bass. At the same time, it doesn't use very long transmission line paths as well. Its working principle is an hybrid combination between a short transmission line and an over-damped reflex load. Moreover, the maximization of the mutual coupling between the drivers increase the fastness of the transient response while maximizing the overall energy efficiency as well.

TRANSDUCERS

The SW218P subwoofer system is equipped with two high power 18" (460mm) transducers capable of long excursion (up to 30mm peak-to-peak), controlled by high stiffness Double Silicon Spider as centering suspension and by heavy duty surround. The motor structure features high strength (BL²/Re) with optimized symmetry and excursion controlled by Inner Flux Demodulating Ring.

The robust copper 100mm (4") voice coil is wound 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 glass reinforced paper, featuring also invisible water repellent treatment.

PERFORMANCES

The SW218P 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 SW218P to deliver unprecedented low frequency reproduction quality with solid deep end, together with very fast and accurate bass response.

