

SW218XP

Dual 18" (460mm), Very High Output, Manifolded Transmission Line, Subwoofer System



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
- ▲ Tetracoil dual voice coil for extended linear response and increased power handling

APPLICATIONS

The SW218XP 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.

THE SW218XP SUBWOOFER SYSTEM

The SW218XP 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.

SYSTEM SPECIFICATIONS

SYSTEM

System's Acoustic Principle	Manifolded Transmission Line
Frequency Response (± 3 dB)	36 Hz – 100 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
Maximum Peak SPL @ 1m	143 dB

TRANSDUCERS

Type	Two 18" (460mm), 4" (100mm) VC
Cone	Water repellent cone and epoxy coated plates
Voice Coil Type	100mm (4in) Tetracoil dual voice coil, equivalent to a single coil diameter larger than 152mm (>6in)
Suspension	Ultra linear suspension behavior

INPUT CONNECTIONS

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

POWER HANDLING

Continuous AES Pink Noise Power	1800W + 1800W
Program Power	3600W + 3600W
Peak Power	7000W + 7000W
Power Compression	
@ -10dB Power (180W + 180W)	0.6dB
@ -3dB Power (900W + 900W)	2.0dB
@ 0dB Power (1800W + 1800W)	3.4dB

ENCLOSURE & CONSTRUCTION

Physical Dimensions	
Width	1215 mm (47.87")
Height	590 mm (23.24")
Depth	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 \varnothing
Net Weight	114 Kg (251.3 lbs.)

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 a 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 SW218XP subwoofer system is equipped with two high power 18" (460mm) transducers capable of very long excursion (up to 30mm peak-to-peak) and featuring a large displacement suspension system.

These transducers use Tetracoil technology, where two different, axially separated magnetic gaps and two inside-outside 100mm (4") diameter voice coils are wound on the same former and suspended evenly in the two magnetic gaps. This creates an equivalent voice coil diameter greater than 6", resulting in a larger heat dissipation area for and increased power handling. Additional key advantages of the Tetracoil technology are also minimized distortion and a very symmetric and flat inductance curve.

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

PERFORMANCES

The SW218XP 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 SW218XP to deliver unprecedented low frequency reproduction quality with solid deep end, together with very fast and accurate bass response.

