

# SSP218-MK3

Double 18" Powered Subwoofer



CUTSHEET



## **OVERVIEW**

The SSP218-MK3 design combines sensitivity, depth, power handling, fidelity and value. It offers amazing versatility and practicality for those who need a lot of low end for a wide variety of applications, delivering massive output, reliably, consistently and with great fidelity.

The SSP218-MK3 sustains its output long-term and is practically impossible to blow thanks to the combination of extremely rugged, very high power handling, long excursion drivers, carefully optimized cabinet and port design and several effective but transparent protection systems that are part of the integrated signal processing. The protection systems effectively prevent thermal overload of the voice coils and minimize long-term thermal compression while having virtually no effect on the transient response and peak output of the loudspeaker.

The SSP218-MK3 achieves extremely flat frequency response, measuring ±1.5dB from 32Hz to 100Hz. No equalization is utilized to achieve this response. Unlike designs that require equalization, the SSP218-MK3's tone, response and sensitivity are native to the design. Competing systems that require bassboost EQ to achieve their stated response are still subject to the physical excursion and thermal limits of their drivers. The SSP218-MK3 system is optimized for full-power operation and is designed to operate at full rated RMS power throughout its operating range while the woofers remain within their X-max specification. This allows it to achieve very high output, low frequency sound with minimal distortion. Versatility is one of the SSP218-MK3s greatest strengths. There are two 35mm pole sockets in each cabinet. Having two sockets allows the subs to be deployed horizontally or vertically while still providing for smaller top cabinets to be mounted on poles above the subs. In addition, using these sockets allows front-fills or larger BASSBOSS top cabinets to be locked in place when stacked on the subs with no unsightly straps required.

The enclosures feature four large rubber feet and corresponding recesses in their tops to facilitate interlocking the boxes when stacked. The feet also interlock with the available wheel carts, allowing multiple boxes to be stacked on a cart for rapid deployment with minimal effort. The stacked set's footprint measures 29.5" x 48", making it easy to fit them securely in almost any commercial truck. The carts can accommodate up to 4 subwoofers, allowing for extremely tight truck-pack density. Alternatively, three-high stacks or 3-high cardioid stacks can be pre-configured on carts, ready to roll in and rock! The cabinets are made from 18mm Birch plywood, are extensively braced and feature 4 steel bar handles. They are coated in weatherproof high-pressure Polyurea and the drivers are protected by a

powder-coated, perforated steel grille. The cones also feature a waterproof coating.

The SSP218-MK3 features a 5000W amplifier with an auto-sensing, globally compatible power supply that can run on input voltages anywhere between 90 and 250 Volts. Full output power is available on anything over 110V. The amplifier's peak-output voltage provides for intense high SPL hits while its sustained output is unparalleled in its ability to deliver the liquid lows. The amplifier is passively cooled via its external heat-sink and by woofer-generated air-flow through the port. When necessary, four blower-fans will engage to provide additional forced-air cooling capacity in more extreme conditions.

New to the MK3 are Neutrik powerCON True 1 TOP (Total Outdoor Protection) waterproof mains connectors. This permits the levels of multiple loudspeakers to be adjusted together and yet independently from the levels of other groups of loudspeakers.

Electrical power is converted into the much more desirable acoustical power by two robust, neodymium motor, 18-inch woofers with massive 4-inch (100mm) voice coils. Neodymium magnets are lighter, and their higher intensity provides higher efficiency, so the result is a lighter and louder cabinet than those with ferrite drivers.

The MK3 features an all-new DSP. The comprehensive suite of processing includes high-pass and lowpass filters as well as multiple protection systems and limiters to prevent driver overload in as many ways as possible, including thermal, excursion and clipping. The five levels of protection actively prevent overheating of the voice coil, minimize long-term thermal compression and limit excursion. Because they operate in 5 different modes, the limiters are sophisticated enough to have a largely unnoticable effect on the transient response and allow the subwoofer to deliver peak output safely.

The new DSP features an Ethernet interface. This can be used to control the cabinets from a computer or to load software or firmware updates. The ethernet connectivity in conjunction with the DSP board allows signal to be sent via Milan AVB. Firmware updates will provide access to this feature.

Within the software, multiple cabinets can be grouped together, allowing them to respond to commands simultaneously. This permits the levels of multiple loudspeakers to be adjusted together and yet independently from the levels of other groups of loudspeakers. In addition to individual and grouped level controls, presets can be loaded and signal levels and temperatures can be monitored. Each cabinet includes a two-port switch so multiple cabinets can be chained on the same data cable.

The MK3 DSP features storage capacity of up to 100 presets, eight of which can be accessed at the touch of a button with no need for a connected computer. The eight directly accessible presets are compatible with all the presets in the MK3 Top Boxes and are also compatible with previous generation tops and subs.

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### **Specifications**

#### Acoustical

Loudspeaker Description: High-Output Dual 18" Subwoofer

Frequency Response (±3 dB): 30-100Hz

Maximum Sustained Output: 135 dB SPL, 1m, 2pi, (half-space)

Max SPL (Peak)\*: 141 dB

Nominal Dispersion (°H x °V): 360 x 360 - Cardioid Mode Available with Multiple Boxes

Electrical

Amplification: 5000 Watts - Dual 2500 W Class D Amplifiers

Processing: Integrated comprehensive DSP provides high pass, low pass, phase alignment and

limiting

Electrical Connector, Amp: Neutrik PowerCON True1 TOP (IP65 Waterproof)

**Electrical Connector, Mains:** Standard US 3-pin 120V electrical plug: NEMA 5-15 (Edison)

Voltage Operating Range: 100-250V

Current Draw, Nominal: 9A @ 120 volts, 4.5A @ 240V

Signal Input Connector: XLR-F

Signal Output Connector: XLR-M - full-range direct pass-through

**Physical** 

Direct radiating vented enclosure, optimally tuned for extended low frequency **Enclosure Type:** 

response with high sensitivity and high power handling

Transducers: Two 18" (457 mm) neodymium motor woofers with 4" (100mm) copper winding

voice coils

Cabinet Construction: 18mm Baltic Birch plywood, extensively braced. Equipped with 4 handles and

interlocking rubber feet

Dimensions (HxWxD): 22.5" x 48" x 29.5" (57.15 cm x 121.92 cm x 74.93 cm) - 23.25" (59.05 cm) high with

feet

Net Weight: 199 lbs. (90 kg) **Shipping Weight:** 230 lbs. (104 kg)

Exterior Finish: Weatherproof bonded high-pressure polyurea

Grille: Perforated, powder-coated steel

Optional

Suspension System: 16 X M10 Threaded Flypoints

**Transport Dollies:** Dolly cart with 4 locking casters and recesses to accept interlocking cabinet feet for

transporting 1 to 4 cabinets

Covers: Heavy-duty padded nylon transport covers for 1, 2 or 4 cabinets

Online Information: bassboss.com/SSP218

\*Peak output is calculated using "industry standard" techniques. These calculation methods create theoretical specifications that are inflated over what can actually be achieved. BASSBOSS real world output specifications are provided as "Maximum SPL" ratings, which reflect actual measured output levels.

Our proactive philosophy causes specifications to be subject to change whenever improvements are made.

#### Pre-Installed Onhoard Presets

High-pass and low-pass filters with included phase compensation.

Preset 1 - 30 Hz - 70 Hz

Preset 2 - 30 Hz - 75 Hz

Preset 3 - 30 Hz - 80 Hz

Preset 4 - 30 Hz - 85 Hz

Preset 5 - 30 Hz - 90 Hz

Preset 6 - 30 Hz - 95 Hz

Preset 7 - 40 Hz - 100 Hz (Vinyl/Neighbor Mode)\*

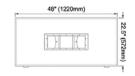
Preset 8 - Cardioid Mode (Use only when cabinet is facing away from audience)

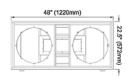
\*Preset 7 raises the high-pass filter to 30 Hz, reducing the level of the deepest bass notes. This provides an option to keep operators out of trouble with neighbors, venue owners or local authorities in the event of noise complaints.

\*\*Preset 8 is the Cardioid mode setting. More information on using Cardioid Mode can be found on page 10.

Information and setup tips about how to get the best and most out of your system:

bassboss.com/edu











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