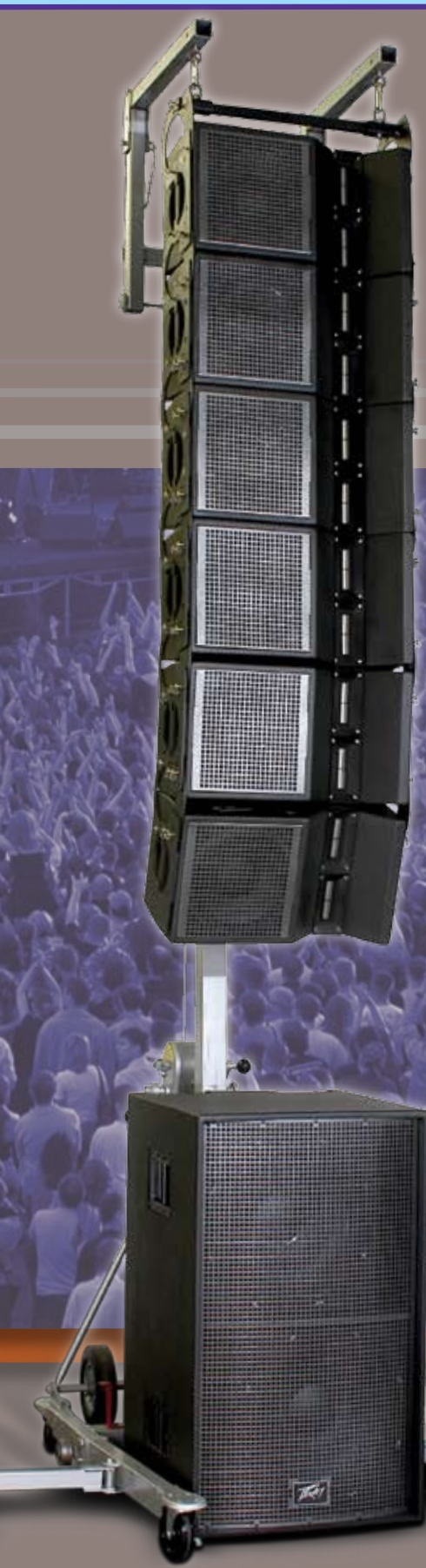

VERSARRAY™
peavey.com

Three configuration options allow you to create the ideal audio solution!







The VersArray 118 subwoofer with optional mouting pole can support a two-box array while the 218 suboofer has an optional ground-stacking kit that will support up to three top boxes and allow for full articulation.

The VersArray 118 and 218 are vented subwoofers designed specifically for the most demanding pro-audio users, incorporating Peavey's ultra-high power Lo Max® 18" woofer (1200W cont./2400W prog.) into a 13-ply Baltic birch cabinet with a patented UniVent™ design (218 only). The UniVent venting system uses an exclusive process to literally pump air through the enclosure and across the drivers, maintaining cool operating temperatures, increasing reliability and reducing power compression under heavy continuous-drive conditions.

A crankable tower lift co-designed with Vermette and available as an accessory can elevate up to six top boxes 13 feet above a 218 Sub, then fold down for easy transport and storage.



MADE IN USA

Sound Guard Equipped SG

Versarray™ 118 Sub

- **Peavey-Exclusive Lo Max® 18" Subwoofer**
- **2400 Watts of Program Power**
- **Full-Power Low Frequency Response Down to 38 Hz!**
- **Neutrik® Speakon® Professional Input Connectors**
- **Compact Design**
- **Speaker Stand-Mount Built In**
- **Painted Acrylic Polyurethane Finish**

Frequency Response, 1 meter on-axis, swept-sine:
Anechoic environment: 47 Hz – 1.5 kHz (±3 dB)
Half-space environment: 41 Hz

Usable Low Frequency limit (-10 dB point):
Anechoic environment: 34 Hz
Half-space environment: 30 Hz

Power Handling:
1,200 W continuous
2,400 W program
4,800 W Peak

Sound Pressure Level, 1 Watt, 1 Meter:
Anechoic environment: 97 dB SPL, (2.83 V input)
Half-space environment: 103 dB SPL

Maximum Sound Pressure Level (1 Meter):
Anechoic environment:
127 dB SPL continuous
133 dB SPL peak
Half-space environment:
133 dB SPL continuous
139 dB SPL peak

Transducer Complement:
1 x 18" vented
Lo Max 18 woofer

Box Tuning Frequency:
36 Hz

Recommended Active Crossover Frequency Region and Slope:
120 Hz at 18 dB/octave minimum

Impedance (Z):
Nominal: 8.0 Ω
Minimum: 6.6 Ω

Input Connections:
2 x 4 pin Neutrik Speakon inputs in parallel
1 x 8 pin Neutrik Speakon input
1 x 4 pin Neutrik Speakon thru (for use with 8-pin input)

Enclosure Materials & Finish:
18 mm, 13-ply Baltic birch plywood finished in acrylic polyurethane paint; black or white

Mounting Provisions:
This unit is not designed for overhead suspension

Dimensions (H x W x D):
22.88" x 25.06" x 26.30"
581 mm x 636 mm x 668 mm

Net Weight:
109 lbs. (49.5 kg)

Versarray 218 Sub

- **Peavey-Exclusive Lo Max 18" Subwoofer**
- **4800 Watts of Program Power**
- **Full-Power Low Frequency Response Down to 38 Hz!**
- **Patented UniVent™ Vented Cooling System**
- **Neutrik Speakon Professional Input Connectors**
- **Built-In Tilt-Back Casters With 4" Wheels**
- **Painted Acrylic Polyurethane Finish**

Frequency Response, 1 meter on-axis, swept-sine:
Anechoic environment: 45 Hz – 1.5 kHz (±3 dB)
Half-space environment: 40 Hz

Usable Low Frequency limit (-10 dB point):
Anechoic environment: 33 Hz
Half-space environment: 30 Hz

Power Handling:
2,400 W continuous
4,800 W program
9,600 W Peak

Sound Pressure Level, 1 Watt, 1 Meter:
Anechoic environment: 100 dB SPL, (2.00 V input)
Half-space environment: 106 dB SPL

Maximum Sound Pressure Level (1 Meter):
Anechoic environment:
134 dB SPL continuous
140 dB SPL peak

Half-space environment:
140 dB SPL continuous
146 dB SPL peak

Transducer Complement:
2 x 18" vented
Lo Max 18 woofer

Box Tuning Frequency:
35 Hz

Recommended Active Crossover Frequency Region and Slope:
120 Hz at 18 dB/octave minimum

Impedance (Z):
Woofers Parallel:
Nominal: 4 Ω
Minimum: 3.3 Ω
Woofers Separate Access:
Nominal: 8 Ω x2
Minimum: 6.6 Ω x2

Input Connections:
2 x 4 pin Neutrik Speakon inputs in parallel
1 x 8 pin Neutrik Speakon input
1 x 4 pin Neutrik Speakon thru (for use with 8-pin Input)

Enclosure Materials & Finish:
18 mm, 13-ply Baltic birch plywood finished in acrylic polyurethane paint; black or white

Mounting Provisions:
This unit is not designed for overhead suspension

Dimensions (H x W x D):
43.38" x 25.06" x 26.30"
1102 mm x 636 mm x 668 mm

Net Weight:
206 lbs. (93.6 kg)

Versarray 112

- **Two-Way Bi-Amp Ribbon Line Source Array SR System**
- **12" Neo Black Widow® 4" VC Woofer**
- **Ribbon Tweeter with Neo Magnet and Composite Material Sandwich Ribbon**
- **90°H x 15°V Coverage Pattern**
- **Easy-Aiming Angle Adjustment Rigging System**
- **Angles Adjustable in 2.5° Increments from 0° to 7.5°**
- **Sound Guard™ Tweeter Protection**
- **Dual Stand-Mount Cups, One Perpendicular, One 5° Angled Down**
- **Inputs are Two Neutrik® Speakon® 4-Pin Jacks**
- **19 mm Baltic Birch Enclosure**

Frequency Response, 1 meter on-axis, swept-sine in anechoic environment:
100 Hz to 24 kHz (±3 dB)

Power Handling:
Low Frequency Section:
500 W continuous
1,000 W program
High Frequency Section:
80 W continuous
160 W program

Sound Pressure Level, 1 Watt, 1 Meter in Anechoic Environment:
Low Frequency Section:
97 dB SPL, (2.83 V input)
High Frequency Section:
99 dB SPL, (4.0 V input for 16 ohm wiring; 2.0 V for 4 ohm wiring)

Maximum Sound Pressure Level (1 meter):
Low Frequency Section:
124 dB SPL continuous
130 dB SPL peak (measured)
High Frequency Section:
117 dB SPL continuous*
131 dB SPL peak (measured)
** Note: This spec is for one module at 1M, line array of 6 units has much higher output at distance due to line array effect where SPL falls of at 3 dB per distance doubling rather than 6 dB.*

Radiation Angle Measured at -6 dB Point:
90° Horizontal by 15° Vertical
(One module only; straight line array of more than one module narrows vertical dispersion accordingly)

Transducer Complement:
Low Frequency Section:
One 1212-8 Neo Black Widow 4" VC Woofer
High Frequency Section:
Two Neo ribbon transducers on a waveguide

Impedance (Z):
Low Frequency:
Nominal: 8.0 Ω
Passive HF:
Nominal: 16 Ω or 4 Ω

Input Connections:
2 x Neutrik® 4-pin Speakon® jack

Enclosure Materials & Finish:
13-ply Baltic birch plywood; black or white

Mounting Provisions:
Custom flying brackets and hardware

Dimensions (H x W x D):
Front: 14.06" x 25.25" x 11.75"
357 mm x 641 mm x 298 mm
Rear: 12.62". x 25.25" x 11.75"
321 mm x 641 mm x 298 mm

Net Weight:
53 lbs. (24.1kg)

Peavey
5022 Hartley Peavey Drive
Meridian, MS 39305

peavey.com

Specifications subject to change without notice.

SPECIFICATIONS Versarray™ 218 Sub



Versarray 218 shown with optional Ground Stack Kit for mounting three accompanying Versarray 112 module loudspeakers (sold separately)

Features:

- Dual Peavey exclusive Lo Max® 18" subwoofers
- 4800 watts of Program Power Rating
- Full power low frequency response down to 34 Hz!
- Patented UniVent™ vented cooling system
- Neutrik® Speakon® professional input connectors, 4- and 8-pin
- Built-In tilt back casters with 4" wheels
- Pairs of heavy-duty steel handles inset on both sides
- Acrylic Polyurethane Painted Finish, Black or White
- Steel grille for speaker protection
- Made in the U.S.A.

Description

The Versarray 218 Sub incorporates the ultra-high power Lo Max 18" woofer and a new cabinet and vent design. The Versarray 218 is a direct radiator vented subwoofer designed specifically for the most demanding Pro-Audio applications.

The Versarray 218 Sub is compact for its power handling, SPL output, distortion performance and bass extension. This is made possible by special characteristics designed into the Lo Max woofer.

The Lo Max 18" driver is Peavey's pinnacle of high-power subwoofer design. An incredible 4,800 watt program rating and extra-long cone excursion add up to amazing levels of clean, deep bass from a pair of 18" woofers. Incorporating all of the features that Peavey has engineered into their woofers over the years, including the field-replaceable basket, Kevlar®-impregnated cone for increased strength and lower distortion due to greater dampening of excess cone vibrations, polyimide-impregnated fiberglass former for higher sensitivity and extended frequency response, die-cast aluminum frame, and a 4-inch diameter edge-wound voice coil with solderless diffusion welded OFHC copper leads.

This makes the Versarray 218 Sub a superior choice for the bass end of any high performance sound system, and it is primarily designed for large professional touring and high performance permanent installs.

Extreme Bracing Cabinet Design

The Versarray 218 Sub cabinet is well braced and very stiff, as internal pressures produced by the Lo Max woofer can be very high. The vent design integrated into the enclosure includes a middle brace to further increase enclosure stiffness. Each cabinet side wall and vent wall are tied together at multiple points using multiple interlocking girdle braces, making these some of the sturdiest subwoofer enclosures on the market. A knuckle-rap test will prove this immediately. The Versarray 218 Sub is constructed of premium 13-ply Baltic birch plywood and is finished with a durable acrylic polyurethane paint, for a good cosmetic presentation. A 16-gauge powder-coated perforated metal grille covers the front of the system to protect the speakers from external damage. Tilt back 4" wheel casters provide for ease of transport and set-up.

The Versarray 218 Sub incorporates Peavey's patented UniVent, covered under US patent #6,549,637. The UniVent venting system literally pumps air through the enclosure, exchanging the stale hot air inside the cabinet for the cooler outside air. This helps keep the woofer operating temperatures from getting so high, and increases reliability and reduces power compression under heavy continuous drive conditions. The air pumping action is achieved without excessive turbulence or any significant net asymmetry of total vent air flow. The UniVent design integrated into the enclosure includes a middle brace in each vent to further increase enclosure stiffness. The large vent area and long path length allow for a large volume of air to move with very low resistance. This is important due to the huge air flow volumes that the Lo Max woofer can produce.

Input connection to the system is made via two 4-pin Neutrik jacks in parallel, or an 8-pin Neutrik jack. A 4-pin Neutrik thru jack is provided for satellite/top-box bi-amping flexibility while maintaining superior signal integrity. The inclusion of a standard 4-pin Neutrik jack in parallel allows for daisy chaining to another cabinet. The system comes wired with both woofers in parallel, but they can be accessed separately by removing the input cup and moving a jumper plug. The two woofers can be driven by separate power amp channels through the Neutrik input jacks.

Despite its compact dimensions for a double 18" bass enclosure, this system generates extremely high sound pressure levels (SPLs) and accepts up to 4,800 watts program of clean amplifier power, resulting in large area coverage with excellent punch and high reliability.

SPECIFICATIONS Versarray™ 218 Sub

Frequency response, 1 meter on-axis, swept-sine:

Anechoic environment:

46 Hz – 1.5 kHz (±3 dB)

Half-space environment:

41 Hz

Usable low frequency limit (-10 dB point):

Anechoic environment: 34 Hz

Half-space environment: 31 Hz

Power handling:

Woofers paralleled

2,400 W continuous

4,800 W program

9,600 W Peak

Woofers driven separately, each

1,200 W continuous

2,400 W program

4,800 W Peak

Sound pressure level, 1 watt, 1 meter:

Woofers paralleled, 2.00 V input

Anechoic environment: 100 dB SPL,

Half-space environment: 106 dB SPL

Woofers driven separately, 2.83V input to each

Anechoic environment: 103 dB SPL,

Half-space environment: 109 dB SPL

Maximum sound pressure level (1 meter):

Anechoic environment:

134 dB SPL continuous

140 dB SPL peak

Half-space environment:

140 dB SPL continuous

146 dB SPL peak

Transducer complement:

2 x 18 in. vented

Lo Max® 18 woofer

Box tuning frequency:

36 Hz

Recommended active crossover frequency region and slope:

120 Hz at 18 dB/octave minimum

Impedance (Z):

Woofers parallel:

Nominal: 4 Ω

Minimum: 3.3 Ω

Woofers separate access:

Nominal: 8 Ω x 2

Minimum: 6.6 Ω x 2

Input connections:

2 x 4-pin Neutrik® Speakon® inputs in Parallel

1 x 8-pin Neutrik Speakon input

1 x 4-pin Neutrik Speakon thru (for use with 8-pin Input)

Enclosure materials & finish:

18 mm 13-ply Baltic birch plywood finished in acrylic polyurethane paint, black or white

Mounting provisions:

This unit is not designed for over head suspension.

Dimensions (H x W x D):

43.38 in. x 25.06 in. x 26.30 in.

1102 mm x 636 mm x 668 mm

Net weight:

204 lbs. (92.7 kg)

Companion Loudspeakers (sold separately):

Versarray 112 line array module speaker system

Optional Accessories:

Ground Stack Kit for mounting the Versarray 112 line array module speaker system

Frequency Response

This measurement is useful in determining how accurately a given unit reproduces an input signal. The frequency response of the Versarray 218 Sub is measured at a distance of 1-meter using a 1 watt (into the nominal impedance) swept-sine input signal. As shown in figure 1, the selected drivers in the Versarray 218 Sub combine to give a smooth frequency response on the central axis from 46 Hz to 1.5 kHz.

Power Handling

There are many different approaches to power handling ratings. Peavey rates this loudspeaker system's power handling using the AES Standard 2-1984. Using audio band 40 Hz to 400 Hz pink noise with peaks of four times the RMS level, this strenuous test signal assures the user that every portion of this system can withstand today's high technology music. This rating is contingent upon having a minimum of 3 dB of amplifier headroom available.

Harmonic Distortion

Second and third harmonic distortions vs. frequency are plotted in figures 3 and 4 for two power levels. Ten percent (10%) of rated input power and either one percent (1%) of rated input power or one watt, whichever is greater. Distortion is read from the graph as the difference between the fundamental signal (frequency response) and the desired harmonic. As an example, a distortion curve that is down 40 dB from the fundamental is equivalent to 1% distortion.

Mounting



Caution: This unit is not designed for overhead suspension!

Architectural and Engineering Specifications

The loudspeaker system shall have an operating bandwidth of 46 Hz to 1.5 kHz, measured on axis at 1m in an anechoic environment, with +/- 3 dB tolerance. The nominal output level shall be 100 dB when measured at a distance of one meter with an input of one watt. The nominal impedance shall be 4 ohms when both woofers are wired in parallel, and two times 8 ohms when wired for separate powering. The maximum continuous power handling for a single cabinet shall be 2,400 watts, maximum program power of 2,400 watts and a peak power input of at least 4,800 watts, with a minimum amplifier headroom of 3 dB. The cabinet shall have two 4" diameter fixed caster wheels on the rear bottom corner for tilt back rolling transport on flat level surfaces. The outside dimensions shall be 43.38 inches high by 25.06 inches wide by 26.30 inches deep. The weight shall be 204 pounds. The loudspeaker system shall be a Peavey model Versarray 218.

WARNING! The Versarray 218 Sub is



extremely efficient and handles a lot of power! This sound system can permanently damage hearing! Use extreme care setting the overall maximum loudness! Due to the clear, clean sound output of the Versarray 218 Sub and the lack of distortion or obvious distress, the sound level seems much lower than it actually is. This system is capable of SPL's in excess of 140 dB at 1 meter from the speaker!

3 + 2 YEAR LIMITED WARRANTY

NOTE: For details, refer to the warranty statement. Copies of this statement may be obtained by contacting Peavey Electronics Corporation, P.O. Box 2898, Meridian, Mississippi 39301-2898.

Amplitude Response Anechoic vs 1/2 Space

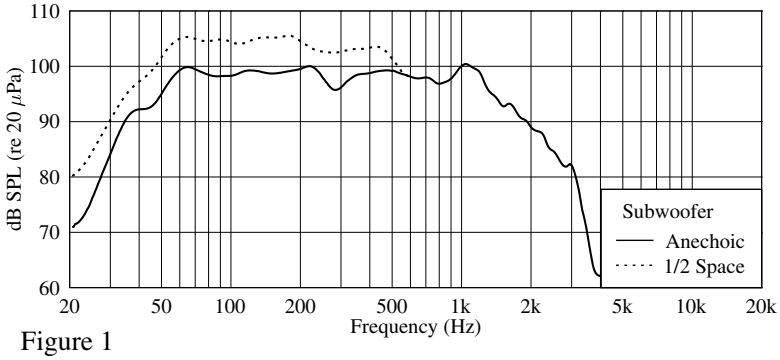


Figure 1

Impedance

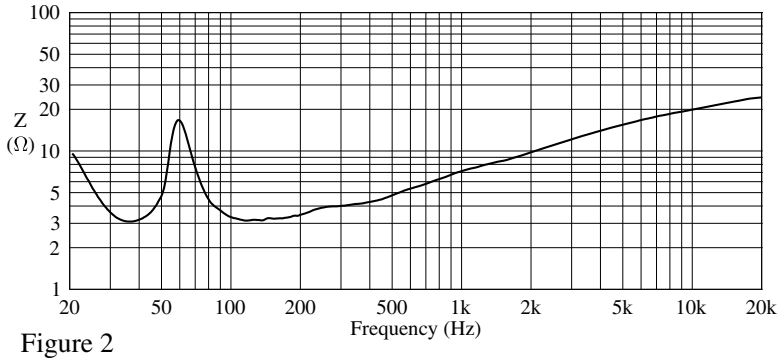


Figure 2

Harmonic Distortion : 1% Rated Power

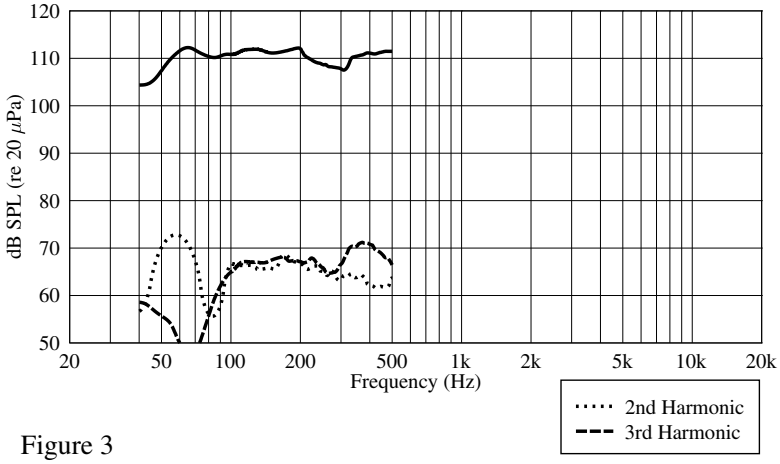


Figure 3

Harmonic Distortion : 10% Rated Power

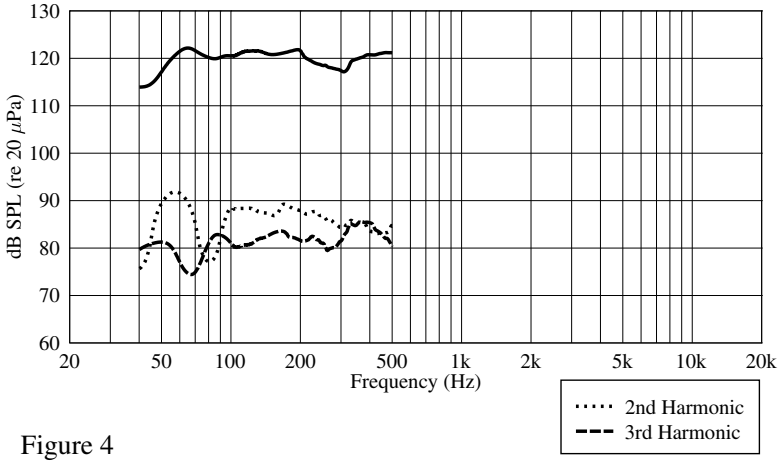
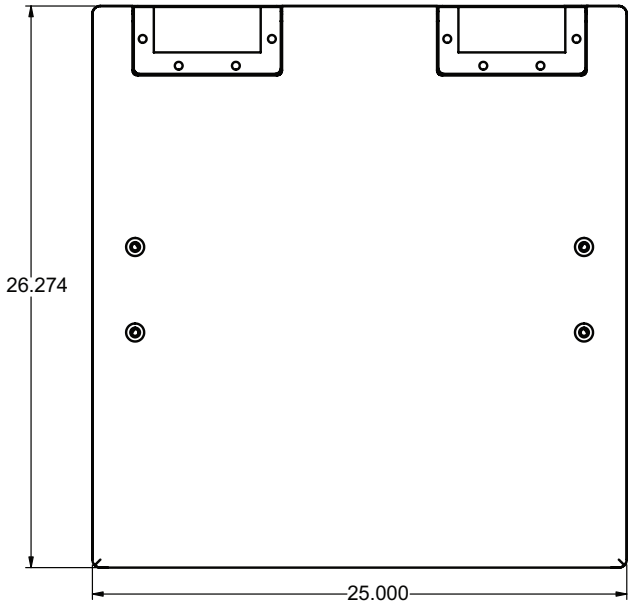
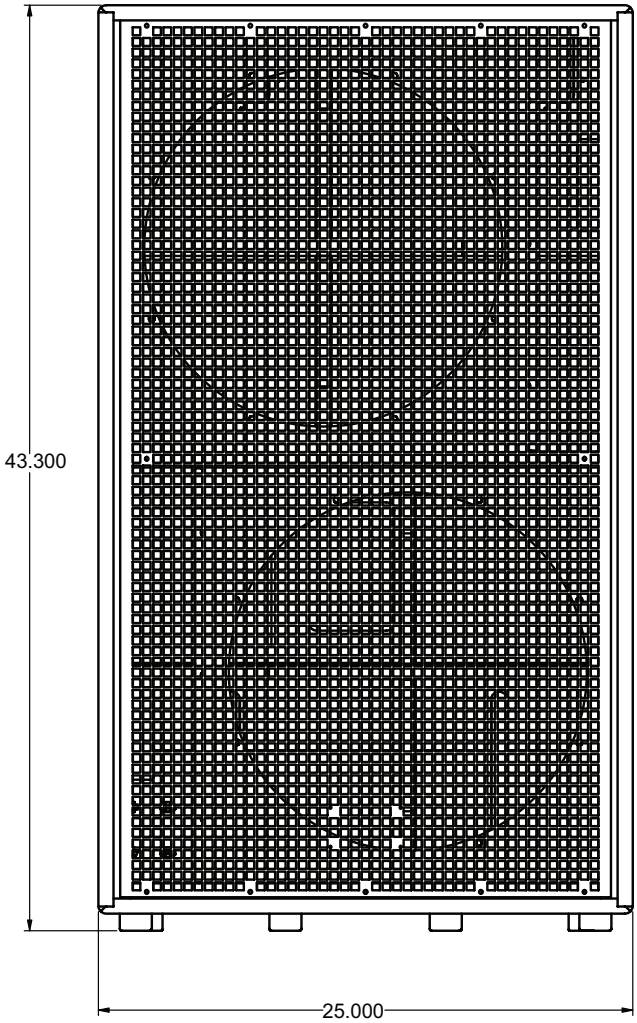
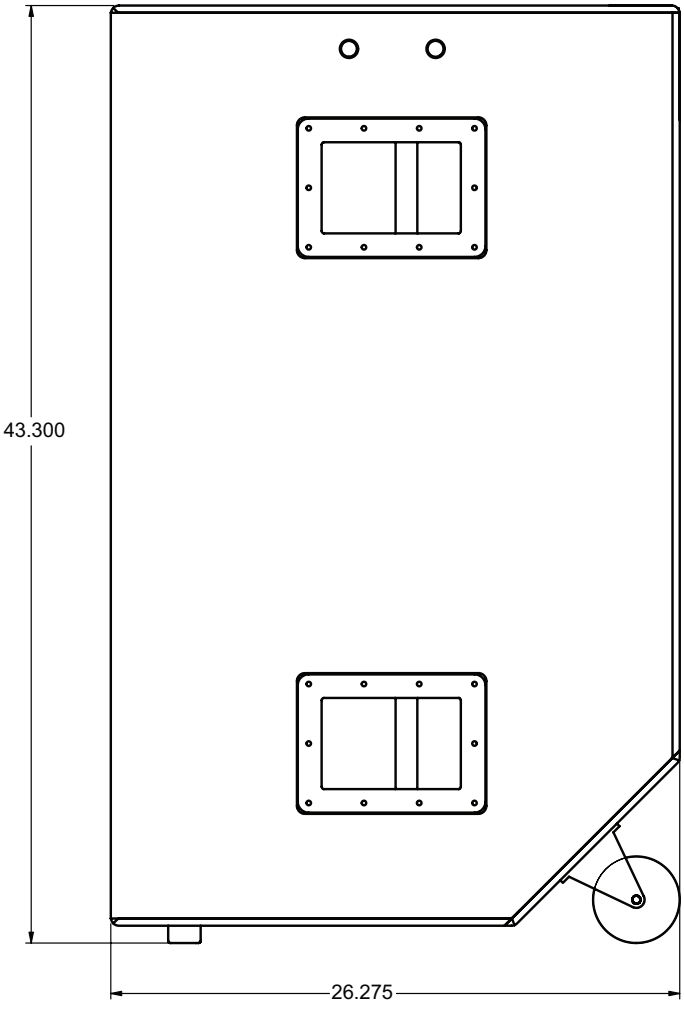


Figure 4

Dimensions







Using the Versarray 218 Sub

Caution! The Versarray 218 Sub can have up to three coupled Versarray 112 line array modules stacked above it, using an optional Ground Stack Kit mounting bracket. When mounting any cabinets above a Versarray 218 Sub, be sure that the unit is on flat or level ground, and is not tilted by more than 5 degrees. If the ground or stage surface creates more than a 5 degree tilt, then do not mount any cabinets above the Versarray™ 218 Sub. The optional Ground Stack Kit mounting bracket is intended to be used with tie-down straps for stability and safety.

Wiring the Versarray 218 Sub

The system comes wired with both woofers in parallel and accessible through the Neutrik® pins 1+ and 1-, but they can be accessed separately by removing the input cup and moving a jumper plug, then the two woofers can be driven by separate power amp channels through the Neutrik input jacks, with the top woofer accessible through Neutrik pins 1+ and 1-, and the bottom woofer through pins 2+ and 2-.

Caution! Never drive only one woofer in a Versarray 218 Sub, this will severely compromise power handling and performance, resulting in boomy and ill-defined bass!

Speaker Cables

For best results, do not daisy-chain the speaker cable runs, or use small speaker cables to power the Versarray 218 Sub, run a single dedicated speaker cable to each Versarray 218 Sub.

A minimum of 12-gauge speaker cable is recommended, to help maintain damping factor, and due to the high amount of power that will be sent to the Versarray 218 Sub. If the speaker cable run is longer than 50 feet, we recommend locating the power amp nearer the Versarray 218 Sub, and running a line level signal out to the power amp.

Using Multiple Versarray 112's mounted over a Versarray 218 Sub

The rigging plate hardware allows up to 3 coupled Versarray 112 units mounted over a Versarray 218 with the use of an optional Ground Stack Kit mounting bracket set.

Do not mount more than 3 cabinets above a Versarray 218 Sub using the Ground Stack Kit mounting bracket set.

Crossover Settings

A number of suitable crossover options are available from Peavey: the Peavey VSX™ 26 Loudspeaker Controller, the VSX™ 48 Loudspeaker Controller, and the Peavey Digitool™MX. These have available pre-configured set-up files that provide an optimized crossover, and EQ for a flat response and level set as a starting place for any permanent installation.



Features and specifications subject to change without notice.

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