



Service Manual

VPX725

Dual 15" High-Power Two-Way Speaker

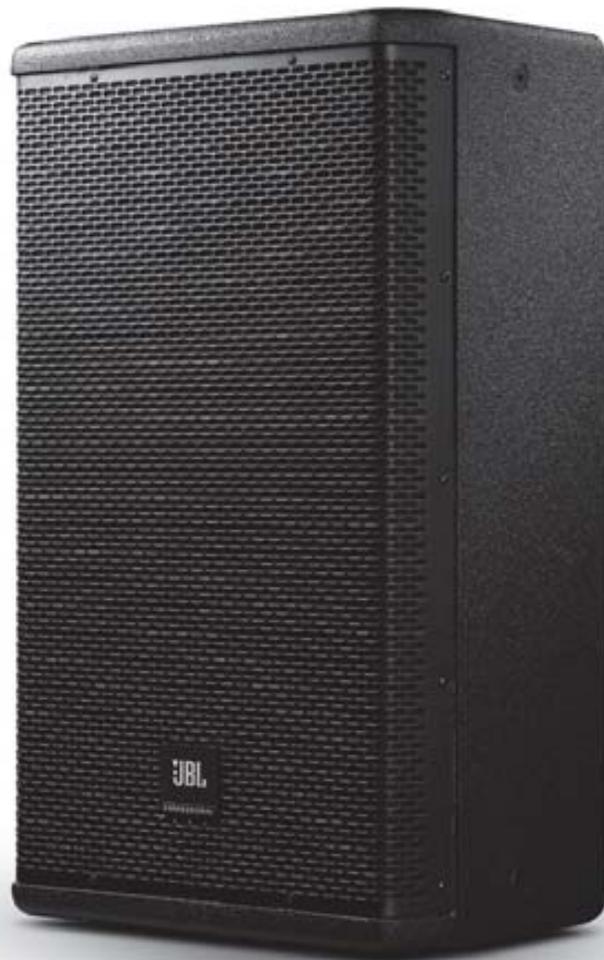




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VPX725

Dual 15" High-Power Two-way Speaker

Professional Series

Key Features:

- ▶ 15" high efficiency woofer
- ▶ 1.5" annular polymer diaphragm compression driver
- ▶ Enclosure constructed of premium plywood and finished in black DuraFlex™ coating
- ▶ 70° × 60° (H × V) coverage pattern for even and smooth response on and off axis
- ▶ Heavy-duty 16-gauge protective screen backed steel grille
- ▶ 12 rigging points for suspension installation

Applications:

- ▶ Sound reinforcement for live music and speech or pre-recorded applications
- ▶ As satellite speaker for use with subwoofers

VPX725 is a dual 15" two-way speaker system designed for live music, speech or pre-recorded applications.

VPX725 uses a 1.5" JBL 2408H-1 annular polymer diaphragm neodymium compression driver to collaborate with two (2) 15" high efficiency woofers for acoustic reproduction of high power, low distortion and low power compression. The 15" woofers embed an optimal demodulating cooling aluminum ring, hence, stable performance is guaranteed even after long working hours. The speaker system creates a 70° × 60° (H × V) coverage pattern to ensure even and smooth response no matter on or off axis.

VPX725 is designed for versatile installation. Twelve (12) suspension points are available for flying mounting and convenient orientation adjust. Two (2) integral handles make it easier to transport and install.

The entire system presents itself in a professional and low profile manner and aims to provide prolonged reliability and durability to its users. The trapezoidal enclosure is constructed of quality plywood and finished in rugged DuraFlex™ coating to sustain frequent transit and set-up. The front grille is made from 16-gauge steel and backed with acoustically transparent fabrics to provide adequate protection to drivers and circuits inside.



Specifications:

System:	
Frequency Range (-10 dB) ¹ :	40 Hz - 20 kHz
Frequency Response (±3 dB) ¹ :	60 Hz - 20 kHz
Coverage Pattern:	70° × 60° (H × V)
Crossover Mode:	Passive
Crossover Frequency:	1.9 kHz
Power Rating ¹ :	900 W/1800 W/3600 W (Continuous/Program/Peak)
Sensitivity (1w@1m) ² :	100 dB
Nominal Impedance:	4 Ohms
Maximum SPL ³ :	130 dB (136 dB peak)
Physical:	
LF Driver:	2 × 15" (381.00 mm) woofers
HF Driver:	1 × JBL 2408H-1 tweeter
Enclosure:	Trapezoidal, 15/18 mm, plywood
Suspension / Mounting:	12 points (3@top, 3@bottom, 2@each side, 2@rear), M10 thread hardware
Transport:	2 × die-cast handles with backing cup
Finish:	Black DuraFlex™ finish
Grille:	Powder coated, black, 16-gauge perforated steel with acoustically transparent black screen backing
Input Connectors:	2 × Neutrik® Speakon® NL-4
Dimensions (H × W × D):	1244 mm × 535 mm × 459 mm (49.0 in × 21.1 in × 18.1 in)
Net Weight:	44.86 Kg (98.90 lbs)

¹ IEC standard, pink noise with 6 dB crest factor for 2 hours

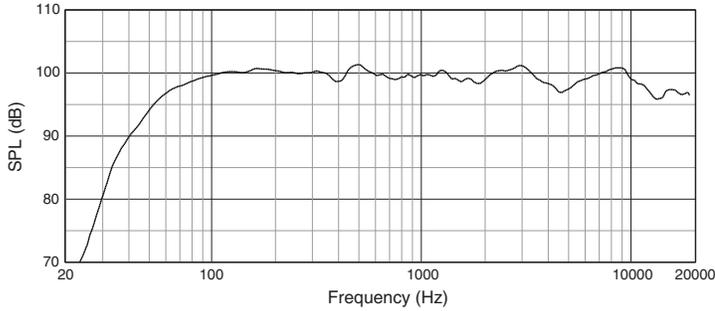
² Full space (4π) conditions

³ Calculated maximum SPL based on rated power handling

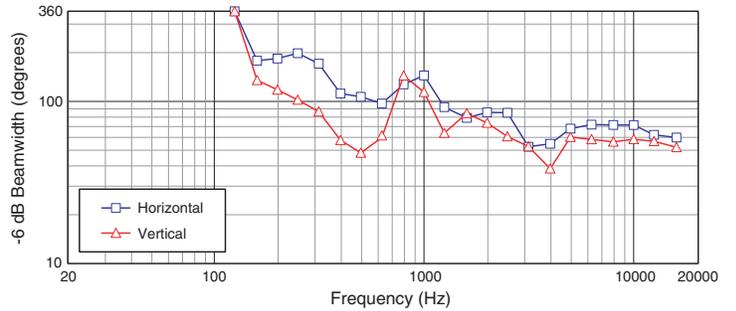
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▶ VPX725 Dual 15" High-Power Two-way Speaker

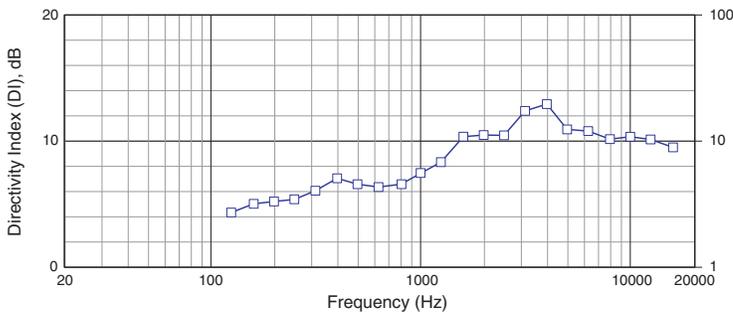
Frequency Response:



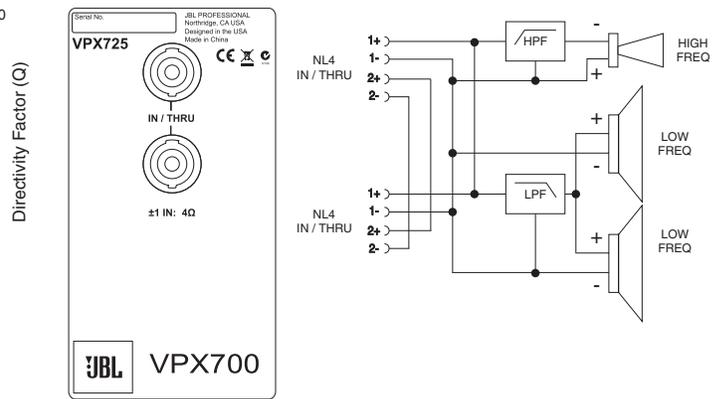
Beamwidth:



Directivity Index:

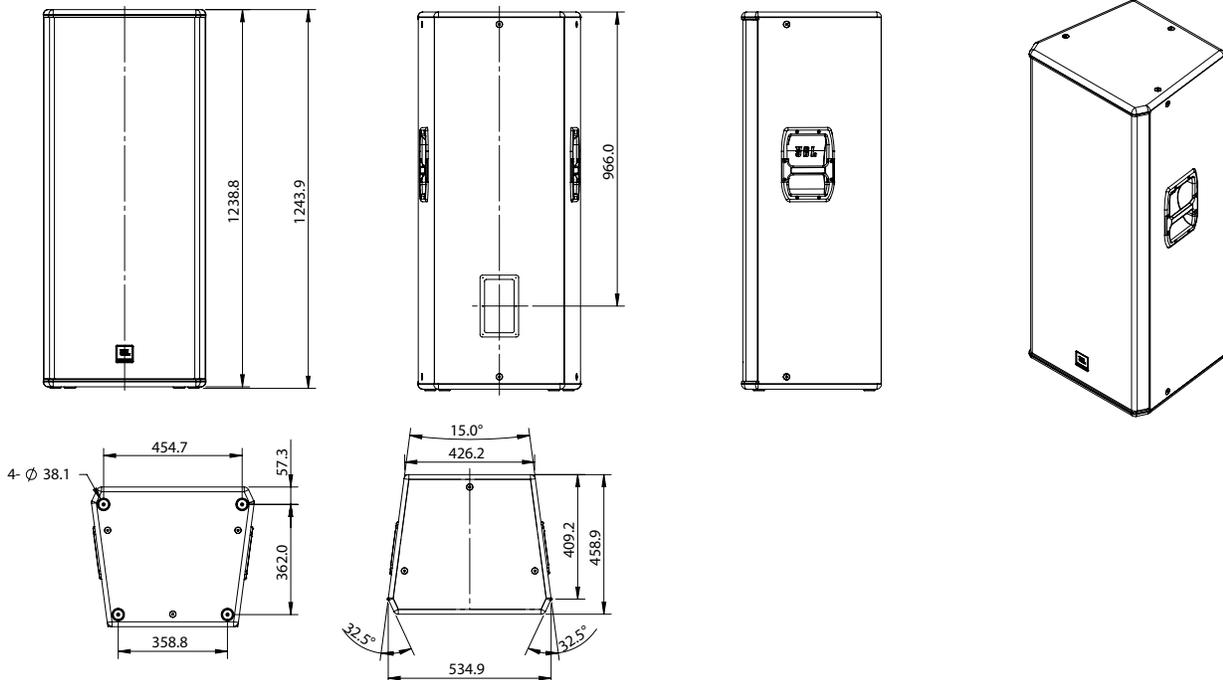


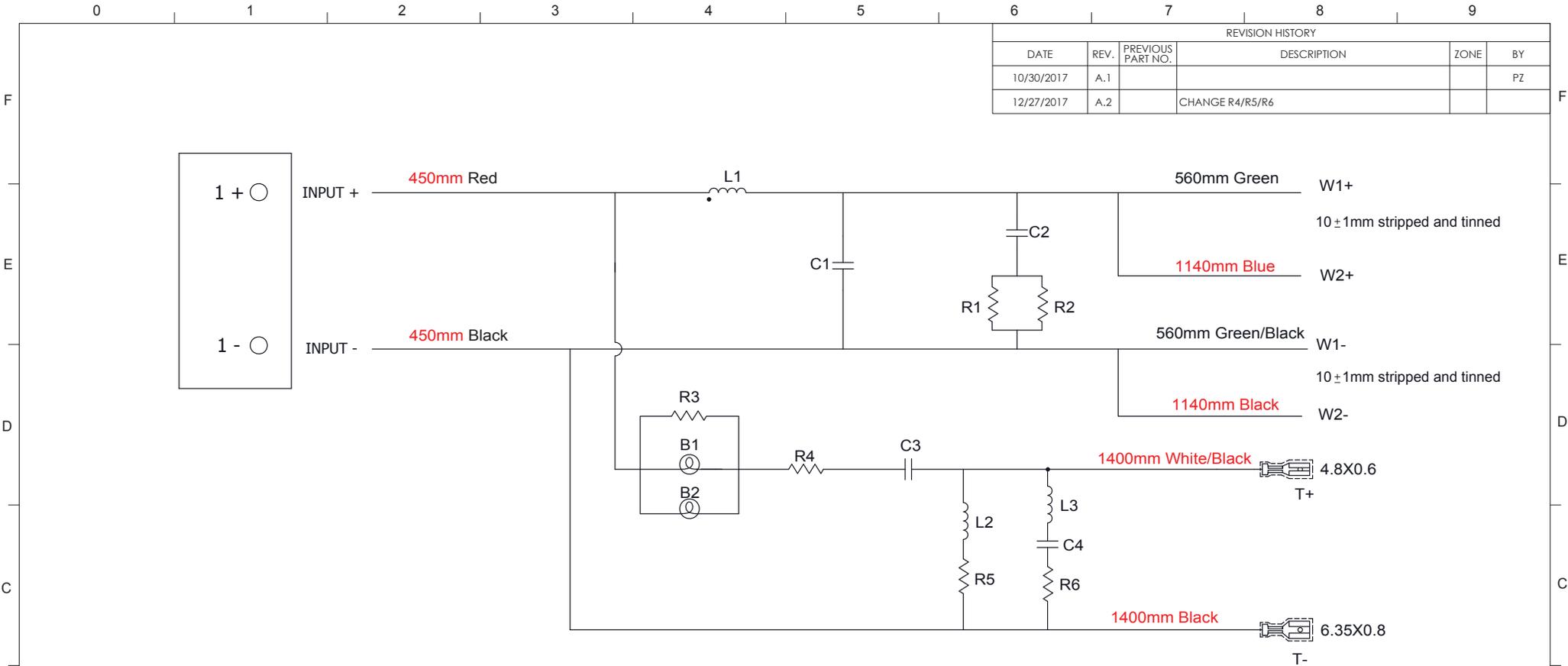
Block Diagram:



Dimensions:

Dimensions in mm





REVISION HISTORY					
DATE	REV.	PREVIOUS PART NO.	DESCRIPTION	ZONE	BY
10/30/2017	A.1				PZ
12/27/2017	A.2		CHANGE R4/R5/R6		

B1 & B2	BULB, SYLVANIA, SK-3 CWTLDS
L1	0.6mH, LAMINATED STEEL CORE, +5%, 1.4mm(PEW-H 180°), DCR0, +5%, CORE SIZE: 11X11X58MM
L2	0.4mH, LAMINATED STEEL CORE, 5%, 0.7mm, DCR 5%, CORE SIZE:
L3	0.32mH, FERRITE CORE, +5%, 0.5mm, DCR +5%, CORE SIZE: Ø 10X24.5MM
C1	15uF, 250V, METALIZED POLYESTER FILM, DF<1%, AXIAL, +5%, 24.5X46MM
C2	12uF, 250V, METALIZED POLYESTER FILM, DF<1%, AXIAL, +5%, 21.5X46MM
C3	3.3uF, 250V, METALIZED POLYESTER FILM, DF<1%, AXIAL, +5%, 13X26MM
C4	3.9uF, 100V, N.P., ELECTROLYTIC, 4%<DF, RADIAL, +5%, 105°C, 10X20MM
R1&R2	16.0 OHMS, 30W, +5%, WIREWOUND CERAMIC, SQZ, 15X13X63MM
R3	20 OHMS, 20W, +5%, WIREWOUND CERAMIC, SQP, 12.5X12.5X63MM
R4	0.5 OHMS, 10W, +5%, WIREWOUND CERAMIC, SQP, 10X10X48MM
R5	0.5 OHMS, 10W, +5%, WIREWOUND CERAMIC, SQP, 10X10X48MM
R6	3.3 OHMS, 10W, +5%, WIREWOUND CERAMIC, SQP, 10X10X48MM

WIRES	16AWG, UL-1015
PCB MATERIAL:	CEM-1
COPPER:	1 oz
THICK:	1.6mm
PCB SIZE:	190X136.50MM

5. NEED TO APPLY HEAT SHRINKAGE TUBE TO ALL SPADE PLUGS FOR PREVENTING SHORT CIRCUIT.
4. INPUT END 5.0 ± 1.0MM STRIPPED AND TINNED, THEN SOLDER ONTO NEUTRIK CONNECTOR.
3. ALL COMPONENTS NEED TO BE FIXED WITH ADHESIVE.
2. APPLY RTV SILICONE BETWEEN B1 BOTH ENDS ONLY.
1. ALL COMPONENTS TO BE TESTED @ 1 KHz.

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<p>ROHS RESTRICTION OF HAZARDOUS SUBSTANCES ALL MATERIALS USED IN THIS PART MUST BE ROHS COMPLIANT. SUPPLIER SHALL PROVIDE A CERTIFICATE OF ROHS COMPLIANCE WITH THE FIRST ARTICLE.</p>		<p>DRAWN BY: PZ DATE: 03/15/2017</p>		<p>TITLE: NETWORK ASY, VPX725</p>	
<p>DESIGNED BY: ? DATE: ?</p>		<p>ENGINEER: ?</p>		<p>NO. 5094444-00 REV. A.2</p>	
<p>SIZE: B</p>		<p>SCALE: 2:1</p>		<p>DO NOT SCALE DRAWING</p>	
				<p>SHEET 2 OF 3</p>	

Refer to the corresponding Service Bill of Materials (SBOM) to order parts stocked by Harman.