

## RoomMatch<sup>®</sup> RMS218 Loudspeaker



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**CAUTION: The Bose® RoomMatch RMS218 Loudspeaker contains no user-serviceable parts. To prevent warranty infractions, refer servicing to warranty service stations or factory service.**

## WARRANTY INFORMATION

The Bose RoomMatch RMS218 Loudspeaker is covered by a 5-year transferable limited warranty.

### PROPRIETARY INFORMATION

THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION OF BOSE CORPORATION WHICH IS BEING FURNISHED ONLY FOR THE PURPOSE OF SERVICING THE IDENTIFIED BOSE PRODUCT BY AN AUTHORIZED BOSE SERVICE CENTER OR OWNER OF THE BOSE PRODUCT, AND SHALL NOT BE REPRODUCED OR USED FOR ANY OTHER PURPOSE.

# SPECIFICATIONS

## MECHANICAL

<b>External dimensions, single speaker:</b>	Single Speaker: 21"H x 37"W x 41.6"D (53.34cm H x 93.9cm W x 105.66cm D)
<b>System weight, unpackaged single speaker:</b>	199 lbs (90.26 Kg)
<b>Packaged System Dimentions</b>	23" H x 39" W x 43.6" D (58.42cm H x 99.06cm W x 110.74cm D)
<b>Volume of Packaged System</b>	16 cubic feet


## ELECTRICAL

<b>Driver Complement:</b>	Two 18 inch woofers
<b>Sensitivity (dB SPL, 1Watt at 1 meter):</b>	95 +/- 1 dB-SPL @ 1W/1m
<b>Maximum Sound Pressure Level – Pink Noise:</b>	127 +/- 1 dB-SPL @ 1M
<b>Frequency Range:</b>	30Hz - 200Hz (+/- 3dB)
<b>Power Handling (one woofer) 8 ohms</b>	750 / Watts
<b>Power Handling (two woofers) 4 ohms</b>	1500 / Watts

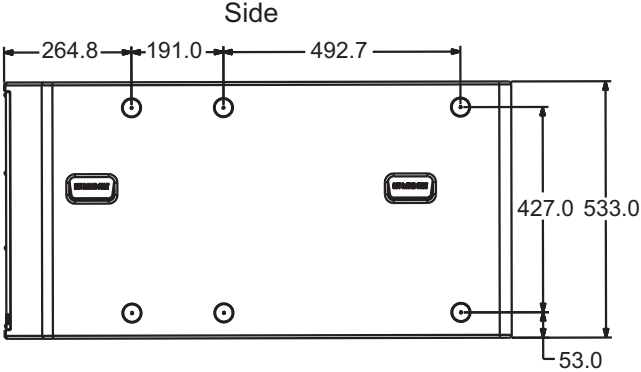
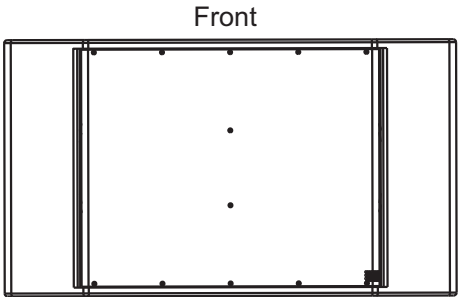
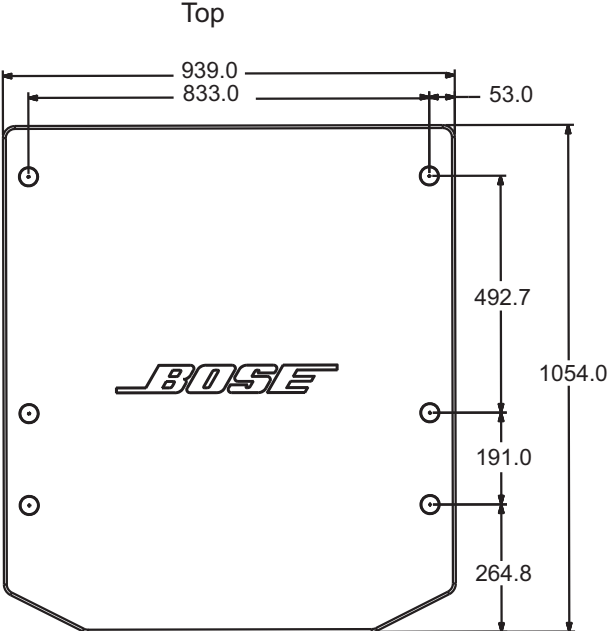
# PRODUCT DESCRIPTION

The ROOMMATCH RMS218 is a subwoofer loudspeaker consisting of a double 18" direct vented bass box. The enclosure is a Birch plywood cabinet. It has hang points that allow for easy integration into standard rigging solutions and has a size making it ideal for bass arrays. It also has points that allow eight (8) CZV mid/hi boxes to be hung / suspended from the bass enclosure. The hanging solution (an accessory) is external to the enclosure. The enclosure is available in black and paintable

## PART LIST NOTES

1. The individual parts located on the PCBs are listed in the Electrical Part List.
2. This part is referenced for informational purposes only. It is not stocked as a repair part. Refer to the next higher assembly for a replacement part.
3.  This part is critical for safety purposes. Failure to use a substitute replacement with the same safety characteristics as the recommended replacement part might create shock, fire and/or other hazards.

# PRODUCT DIMENSIONS



# PACKING LIST

RoomMatch® RMS218 Subwoofer (see Figure 1)

Item Number	Description	Part Number	Qty	Note
1	CARTON, RMS218	372072-0010	1	2
2	PACKING, CORNER PAD, RMS215	343899-0010	4	2
3	PACKING, TOP/BOTTOM PAD, RMS218	372074-0010	3	2
4	AU/NZ WARR SLIP SHEET 8.5 X 5.5	355731-0010	1	2
5	GUIDE, INSTALL, RMS215/218 SUBWOOFER SPK	375010-0010	1	2
6	PACKING, FRONT PAD, RMS218	372073-0010	1	2
-	PACKING, POLYBAG, RMS218	372075-0010	1	2

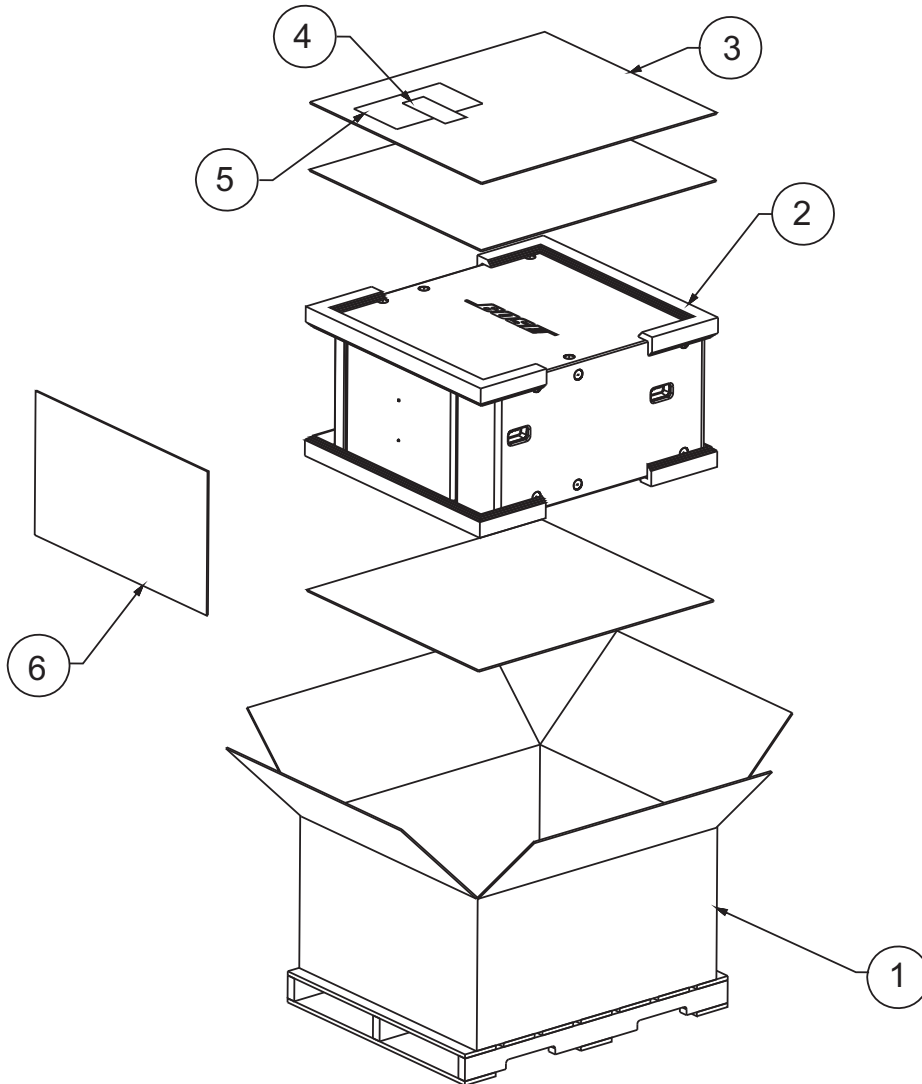


Figure 1. RoomMatch RMS218

# MAIN PART LIST

RoomMatch®RMS218 Subwoofer (see Figure 2)

Item Number	Description	Part Number	Qty	Note
1	ENCLOSURE, RMS215	-	1	2
2	ASSY, HANDLE, ROOMMATCH RMS215, BLK	330033-0110	4	
3	I/O PANEL SCREWS, M4, OPEN ENDED, ZINC PLATED	-	8	2
4	GASKET, I/O PANEL	330029-0010	1	2
5	I/O PANEL, ASSY, (SERVICE)	363409-011S	1	
	I/O PANEL, ASSY, ROOMMATCH RMS218, BLK	363409-0110	1	2
6	ANGLE BRACE, BLK	330027-0110	12	2
7	WOOFER, 18 INCH, SPEAKERS, 18SW115 SERVICE	344052-001S	2	
8	SCREWS, M4 15MM LONG, P2 PAN HEAD, STAINLESS STEEL	-	12	2
9	GRILLE, ROOMMATCH RMS218, BLK Sub Assy (SERVICE)	372511-011S	1	
10	GASKET, GRILLE, RMS218	371353-0010	2	2
11	GASKET, GRILLE CENTER POST, RMS218	371354-0010	2	2
12	HEX HEAD CAP SCREWS, M6/25MM LONG	-	16	2
13	SCREW, INSERT, RIGGING, BLK (SERVICE)	330026-011S	24	
14	CONN, SPEAKON, 4POS, MALE, 240V, 30A, BLACK	298548	2	

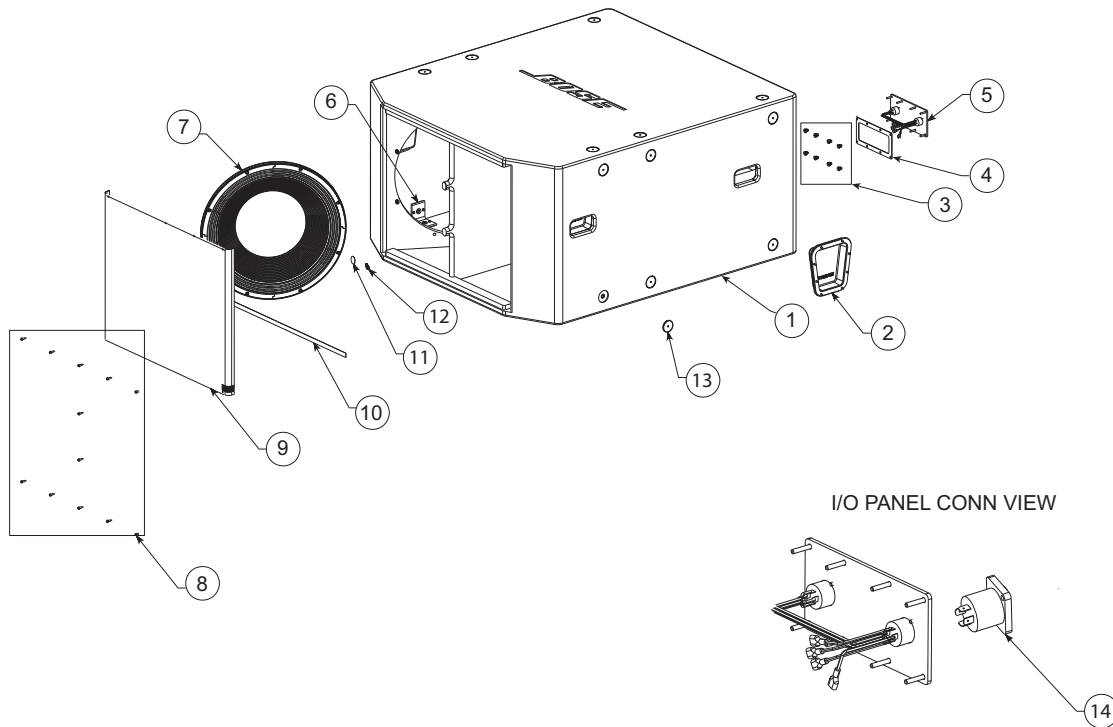
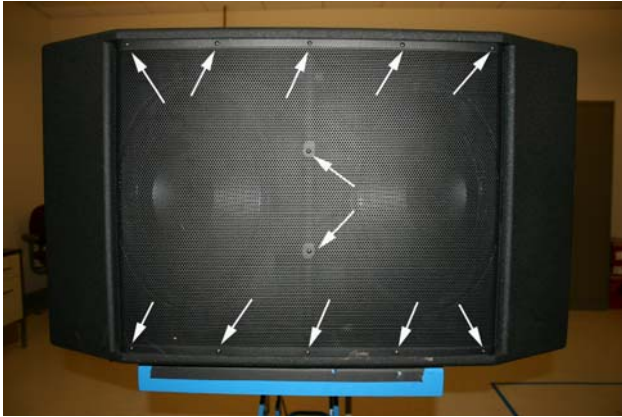


Figure 2. RoomMatch RMS218 Subwoofer Exploded View

# DISASSEMBLY PROCEDURES



## 1. Grille Removal

**1.1** Remove the five screws on the top, five on the bottom and 2 in the middle of the grille using a #2 phillips head screwdriver.

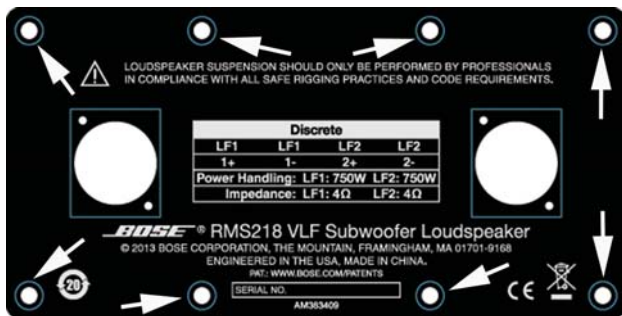
**1.2** Lift off the grille assembly from the cabinet.



## 2. Woofer Removal

**2.1** Remove the eight screws around the woofer basket using a 5mm hex key.

**2.2** Repeat procedure 2.1 to remove the other woofer.



## 3. Input Panel Assembly Removal

**3.1** Remove the eight screws using a #2 Phillips head screwdriver. Gently pry the panel from the cabinet using a flat head screwdriver.

**3.2** Disconnect the eight Faston connectors from the Neutrik connectors.



# TEST PROCEDURES

**! Caution:** Hearing protection is required.

**Equipment Required:**

- Audio signal generator
- Amplifier
- DC Power supply

## 1. Rub and Tick Test

**1.1** Apply an audio sine wave signal of 20Hz, 20 VRMS +/- 1 VRMS to pins 1+ and 1- and 2+ and 2- of the Neutrik® NL4 input connector. This will drive both woofers at the same time. **Note:** The NL4 connectors are connected in parallel with each other.

**1.2** No extraneous noise such as rubbing, scraping or ticking should be heard.

## 2. Phase Test

**2.1** Momentarily apply a +10 VDC +/- 1 VDC to pins 1+ and 1- and 2+ and 2- to both input jacks of the speaker.

**2.2** Observe polarity when connecting the DC power supply. Both of the drivers should move outward when the DC level is applied.

## 3. Frequency Power Sweep Test

**3.1** Apply an audio sine wave signal of 30Hz, 20 VRMS +/- 1 VRMS to pins 1+ and 1- and 2+ and 2- of the NL4 input connector.

**3.2** Sweep the audio signal generator frequency slowly from 20hz to 300hz.

**3.3** Listen for any buzzes, rattles or other extraneous noises from the loudspeaker.

## 4. Air Leak Test

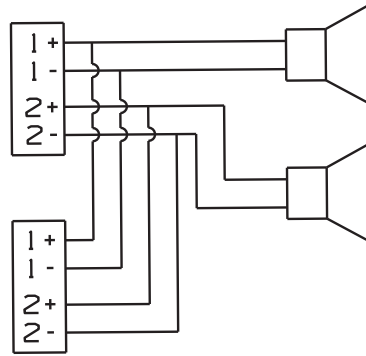
**4.1** Apply an audio sine wave signal of 10Hz, 20 VRMS +/- 1 VRMS to pins 1+ and 1- and 2+ and 2- of the NL4 input connector.

**4.2** Listen for hissing or whooshing noises around the cabinet, woofer mounting holes, around the woofer surround area, at the connector panel and underneath the inserts.

**4.3** If an air leak is detected, repair it and perform this test again.

**NOTE:** All repairs must be hidden.

## WIRING DIAGRAM



## WIRING DIAGRAM

### Wiring – Input Connectors

Each pair of terminals on the NL4 is wired to each 18 inch woofer. This will allow the product to be wired independently as two 8 ohm loads.

# SERVICE MANUAL REVISION HISTORY

<b>Date</b>	<b>Revision Level</b>	<b>Description of Change</b>	<b>Change Driven By</b>	<b>Pages Affected</b>
10/13	00	Document released at revision 00.	Service manual initial release	All
1/20/14	01	Added service part numbers	-	pg7
2/5/14	02	Removed part numbers	-	Pg7

SPECIFICATIONS AND FEATURES SUBJECT TO CHANGE WITHOUT NOTICE

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***Better sound through research***®

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