



Bose® MB210 Compact Subwoofer

Installation Guide*
Installationsvejledning*
Installationsanleitung*
Guía de instalación*
Guide d'installation*
Guida all'installazione*
Installatiehandleiding*
Installationsanvisning*

- * For use by professional installers only.
- * Kun til brug for erfarne installatører.
- * Montage ausschließlich durch ausgebildetes Installationspersonal.
- * Para uso exclusivo de instaladores capacitados.
- * Réservé aux installateurs ayant suivi une formation.
- * Solo per l'uso da parte di installatori professionisti.
- * Uitsluitend voor gebruik door ervaren installateurs.
- * Ska endast användas av utbildade installatörer.

Please read and keep all safety and use instructions.

This product is intended for installation by professional installers only! This document is intended to provide professional installers with basic installation and safety guidelines for this product in typical fixed-installation systems. Please read this document and all safety warnings before attempting installation.

WARNINGS:



- All Bose products must be installed in accordance with local, state, federal and industry regulations. It is the installer’s responsibility to ensure installation of the loudspeakers and mounting system is performed in accordance with all applicable codes, including local building codes and regulations. Consult the local authority having jurisdiction before installing this product.
- Unsafe mounting or overhead suspension of any heavy load can result in serious injury or death, and property damage. It is the installer’s responsibility to evaluate the reliability of any mounting method used for their application. Only professional installers with the knowledge of proper hardware and safe mounting techniques should attempt to install any loudspeaker overhead.
- Do not mount the product in locations where condensation may occur.
- This product is not intended for installation or use in indoor water facility areas (including, without limitation, indoor pools, indoor water parks, hot tub rooms, saunas, steam rooms and indoor skating rinks).
- Only use the mounting hardware supplied with this product.
- Do not mount on surfaces that are not sturdy, or that have hazards concealed behind them, such as electrical wiring or plumbing. If you are not sure about installing the bracket, contact a qualified professional installer. Ensure the bracket is installed according to local building codes.
- Do not place or install the bracket or product near any heat sources, such as fireplaces, radiators, heat registers or other apparatus (including amplifiers) that produce heat.



This product contains magnetic material. Consult your physician on whether this might affect your implantable medical device.

Important Safety Instructions:

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer’s instructions.
8. Do not install near any heat sources, such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Only use attachments/accessories specified by the manufacturer.



This symbol means the product must not be discarded as household waste, and should be delivered to an appropriate collection facility for recycling. Proper disposal and recycling helps protect natural resources, human health and the environment. For more information on disposal and recycling of this product, contact your local municipality, disposal service, or the shop where you bought this product.

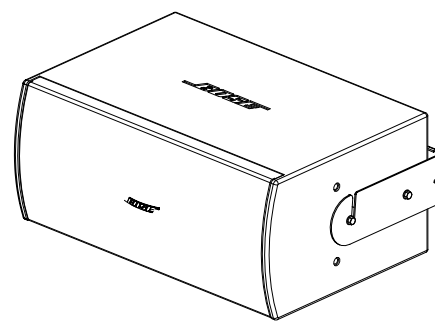
Names and Contents of Toxic or Hazardous Substances or Elements

Part Name	Toxic or Hazardous Substances and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent (CR(VI))	Polybrominated Biphenyl (PBB)	Polybrominated diphenylether (PBDE)
PCBs	X	0	0	0	0	0
Metal parts	X	0	0	0	0	0
Plastic parts	0	0	0	0	0	0
Speakers	X	0	0	0	0	0
Cables	X	0	0	0	0	0

This table is prepared in accordance with the provisions of SJ/T 11364.
 O: Indicates that said hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement of GB/T 26572.
 X: Indicates that said hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement of GB/T 26572.

Product Overview

Bose Professional MB210 compact subwoofers are designed for background/foreground music and small sound-reinforcement systems that require low-frequency extension down to 37 Hz. The MB210 subwoofer features two (2) 10-inch high-excursion woofers, derived from the award-winning Bose Professional F1 portable, powered subwoofer, in a compact, Baltic-birch plywood enclosure optimized for fixed-installation applications. Featuring outstanding performance to size ratio, the MB210 is designed to complement Bose Professional FreeSpace®, Panaray®, and RMU loudspeaker models with additional bass impact.



Product Features

- **2 x 10" high-excursion woofers** for high-output bass in a compact enclosure. Transducers derived from award-winning Bose F1 portable, powered subwoofer
- **500 W long-term power handling** for high sound output and reliability
- **Low-frequency extension** down to 37 Hz
- **123 dB maximum continuous SPL**, 129 dB peak SPL
- **Baltic Birch plywood enclosure** with compact size for installations
- **Polyurethane paint** available in black or white
- **U-bracket included** for easy mounting to walls or ceiling

Package Contents

The MB210 loudspeaker package contains the following:

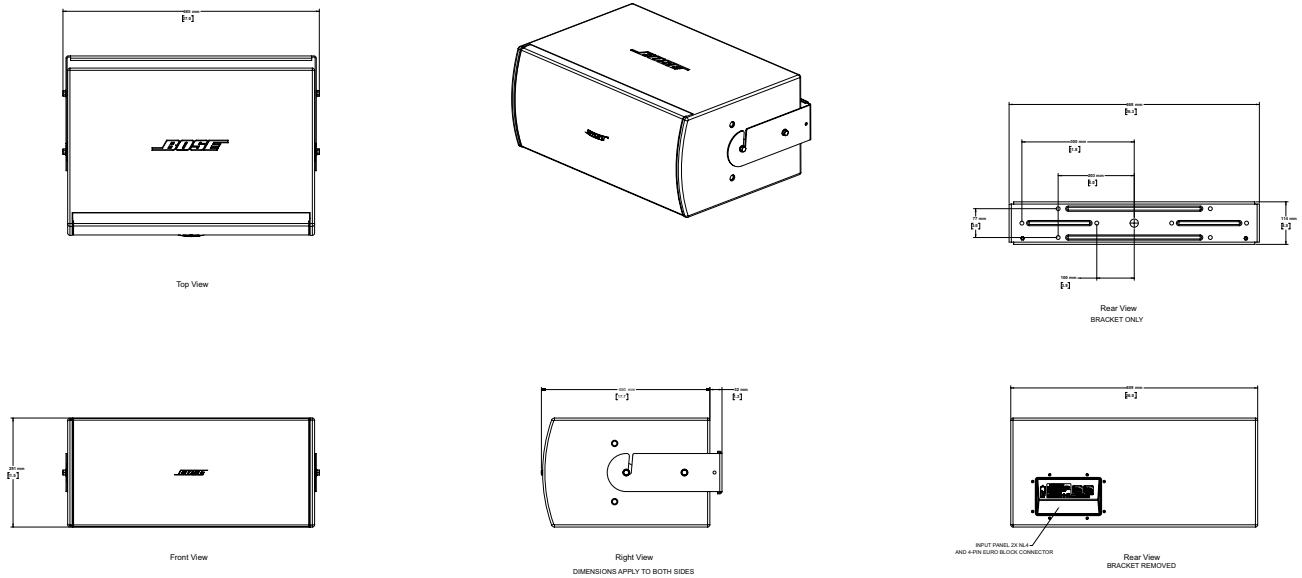
- MB210 loudspeaker
- Mounting U-bracket
- Four (4) screws for mounting bracket
- Four (4) rubber washers for mounting bracket
- Four (4) stick-on ground feet
- One (1) black 4-pin Euroblock
- T3 square drive

Please complete and retain for your records.

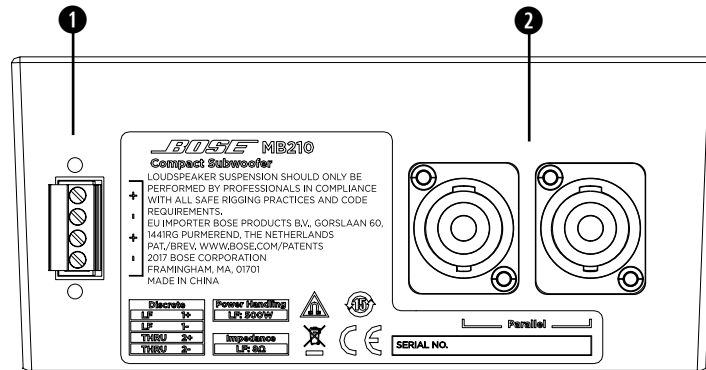
Serial number: _____

Model number: _____

Loudspeaker and U-Bracket Dimensions



Connector Panel



The MB210 subwoofer includes the following connections (all wired in parallel):

- ❶ Euroblock connector (4-pin)
- ❷ NL4 connectors

Mounting Loudspeaker with U-Bracket

Before You Begin - Recommended Tools

- 10 mm sockets and socket wrenches - for M8 bolts on U-bracket
- T3 square drive (included) - for removing plastic inserts.

CAUTION:

- The loudspeaker weighs 21.8 kg (48 lbs) with U-bracket attached. Use caution when lifting to avoid injury and/or damage to the speaker.
- Do not place loudspeaker resting on its grille.
- Bose does not recommend or support use of eyebolts in threaded holes instead of U-bracket.

Install Loudspeaker Using U-Bracket

1. Choose a mounting location that will safely support the weight of the loudspeaker. The loudspeaker can be mounted horizontally or vertically.
2. Remove packing materials and place the loudspeaker on the floor beneath the planned suspension point.

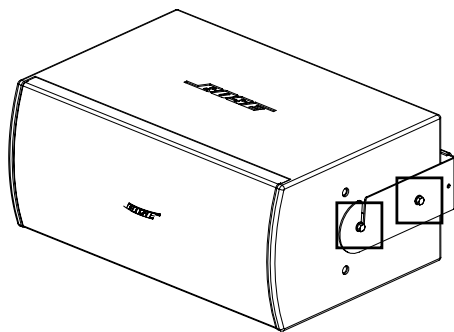


Figure: Threaded holes for horizontal mounting

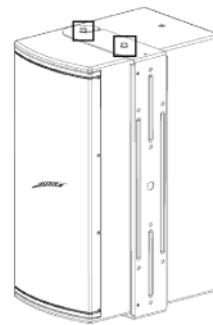


Figure: Threaded holes for vertical mounting

3. Determine which threaded holes on the loudspeaker are required for mounting, depending on the loudspeaker's mounting orientation. See the following figures.
4. Using the included T3 square drive, remove the plastic inserts from the appropriate threaded holes on each end of the loudspeaker.
CAUTION: Do not attach the loudspeaker to the U-bracket using the plastic inserts.
5. Insert one M8 bolt and rubber washer into the threaded hole that corresponds to the open end of the U-bracket, on each end of the loudspeaker. Do not tighten.
NOTE: Use only the included hardware to attach the U-bracket to the loudspeaker.
6. Use the U-bracket as a guide to mark the fastening holes on the mounting surface.
CAUTION: To attach U-brackets to the mounting surface, choose fasteners that are consistent with all local building codes and requirements to support the weight of the speaker. As a general guideline, use 5/16" x 3" lag screws into wood and 5/16" - 18 double expansion anchors a minimum of 1.5 inches into concrete and masonry block.
7. Drill holes into mounting surface, using previously marked positions.
8. Attach the U-bracket to the building surface using the required fasteners, such as those specified in Step 6.
9. Place the loudspeaker on the bracket by sliding the M8 bolts attached to the loudspeaker into the bracket slots. Keep the rubber washers between the bracket and the speaker enclosure.
10. Insert one M8 bolt and rubber washer into the remaining threaded hole, on each end of the loudspeaker. Place the washer between the U-bracket and the loudspeaker.
11. Tighten the four bolts with a 10 mm socket tool, using a torque not to exceed 21 to 28 Newton-meters (15 to 20 foot-pounds).
12. Connect field wiring and test loudspeaker operation.

Using the Ground Feet

The MB210 subwoofer can be placed on the ground in either the horizontal or vertical orientation, using the ground feet. To attach the ground feet:

1. Remove the backing from the adhesive side of the first ground foot.
2. Position the ground foot in one corner of the loudspeaker, on the side that will be resting on the floor. See the figures below.
3. Press the adhesive side of the ground foot onto the loudspeaker to adhere.
4. Repeat steps for the remaining three ground feet.

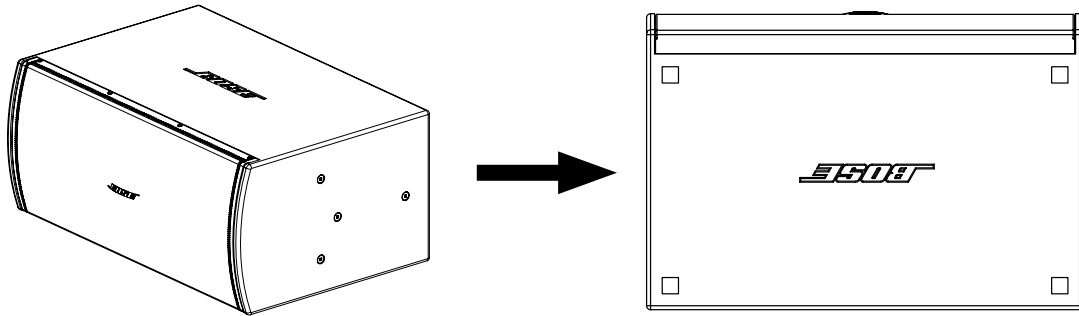


Figure: Ground feet position for horizontal orientation

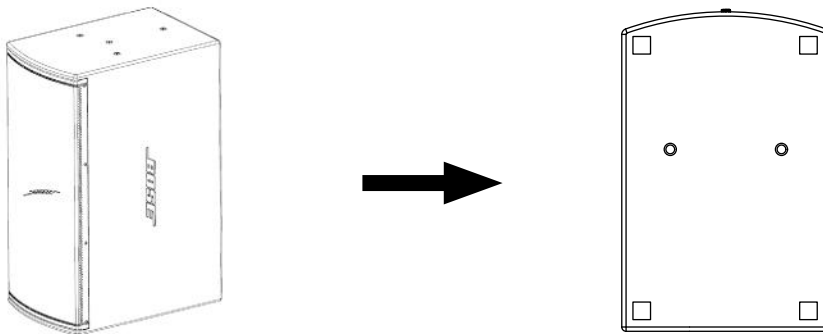


Figure: Ground feet position for vertical orientation

Recommended Amplifier

Selecting the proper amplifier size for a given loudspeaker requires analysis of the transducer long-term (or RMS) power rating, dynamic range of the input-source material (crest factor), desired sound pressure levels, and other factors. As a general guideline, the following table provides recommended power amplifier ranges.

Model	Nominal Impedance	Required Channels	Loudspeaker Long-Term Power	Amp Power Rating
MB210	8 Ω	1	500 W	500 - 2000 W

CAUTION: Failure to follow these guidelines may result in damage to the loudspeaker.

The Bose® PowerMatch configurable power amplifiers offer optimal amplification, amplifier limiting, digital signal processing (DSP), and DSP presets for use with the MB210 Compact Subwoofer. Please refer to the specifications listed on the pro.Bose.com website for amplifiers and compare with the table above to determine which model is best for your particular system design.

Recommended Signal Processing

Digital signal processing (DSP) is required for infrasonic bandpass protection, amplifier power limiting and active crossover for the MB210 loudspeaker. Bose PowerMatch and PowerShare amplifiers provide recommended bandpass protection and amplifier limiting functions.

Bose ControlSpace® DSP hardware, including the ESP-880, ESP-1600, ESP-1240, ESP-4120, and ESP-00, can also be used to provide bandpass protection and active crossover.

The latest Control Space Designer software for PowerMatch, PowerShare, and DSP hardware, which contains the latest MB210 preset files, can be found in the Software section of pro.Bose.com.

The following table lists the recommended infrasonic bandpass protection and amplifier limiter settings for the MB210 loudspeaker.

Recommended Bandpass and Amplifier Limiter Settings**		Bandpass		Recommended Crossover	Limiter					
		High Pass		(Requires active crossover in DSP or Amplifier)	V Peak			V RMS		
Amplifier	Channel	Type	Freq.	Range	Threshold	Attack	Release	Threshold	Attack	Release
PowerMatch 8500/8500N	1 x Mono Mode 300 W channel, 8 Ohm	BW24	40 Hz	80 - 200 Hz	71*	1.5	100	50*	1000	2000
PowerMatch 8500/8500N	1 x V-bridge Mode 1000 W channel, 8 Ohm	BW24	40 Hz	80 - 200 Hz	126.5	1.5	100	63	1000	2000

Recommended Bandpass and Amplifier Limiter Settings**		Bandpass		Recommended Crossover	Limiter					
		High Pass		(Requires active crossover in DSP or Amplifier)	V Peak			V RMS		
Amplifier	Channel	Type	Freq.	Range	Threshold	Attack	Release	Threshold	Attack	Release
PowerShare PS602/PS602P/PS604	1 x channel using 300 W, 8 Ohm	BW24	40 Hz	80 - 200 Hz	71*	1.5	100	50*	1000	2000
PowerShare PS602/PS602P/PS604	1 x channel 600 W, 8 Ohm	BW24	40 Hz	80 - 200 Hz	100	1.5	100	63	1000	2000

* Indicates maximum available voltage for configuration

** Recommended parameters for Bose products; may not give the same performance in other devices

Recommended Mid-High Loudspeakers

The MB210 loudspeaker pairs excellently with Bose FreeSpace, RoomMatch Utility and Panaray lines of loudspeakers, and can also be used with any other passive Loudspeakers.

MB210 Loudspeakers Technical Specifications

Single Module Performance				
Frequency Response (- 3 dB) ⁽¹⁾	45 - 180 Hz			
Frequency Range (-10 dB)	37 - 270 Hz			
Recommended High-Pass Protection Filter	45 Hz with 24dB / octave filter			
Nominal Coverage Pattern	Omnidirectional below 200 Hz			
Recommended Crossover	80 - 200 Hz (requires active crossover in DSP)			
	Bose extended-lifecycle test ⁽⁴⁾		AES transducer test ⁽⁵⁾	
	Free Field	Half-Space	Free Field	Half-Space
Power Handling, long-term continuous	500 W	500 W	625 W	625 W
Power Handling, peak	2000 W	2000 W	2500 W	2500 W
Sensitivity (SPL / 1W @ 1m) ⁽²⁾	90 dB	96 dB	90 dB	96 dB
Calculated Maximum SPL @ 1 m ⁽³⁾	117 dB	123 dB	118 dB	124 dB
Calculated Maximum SPL @ 1 m, peak	123 dB	129 dB	124 dB	130 dB
Transducers				
Low Frequency	2 x Bose 10-inch, high-excursion woofers			
Nominal Impedance	8 Ohms			
Physical				
Enclosure Material	Baltic birch plywood			
Finish	Polyurethane coating, black or white			
Grill	Perforated steel, powder-coated finish, black or white			
Environmental	Indoor only			
Connectors	2 x Neutrik® NL4 plus 4-pin Euro block, all wired parallel			
Suspension / Mounting	4 x M8 on left and right sides for U-bracket attachment			
Dimensions (H x W x D)	291 mm x 659 mm x 450 mm (11.5" x 26" x 17.7")			
Net Weight	18.6 kg (41 lbs) / 21.8 kg (48 lbs) with U-bracket			
Shipping Weight	27.2 kg (59.9 lbs)			
Included accessories	U-bracket, 4x adhesive-mounted rubber ground-stack feet			

Footnotes

- (1) Frequency response and range measured on-axis with recommended EQ in indicated anechoic environment
 (2) Sensitivity with indicated boundary, 40 - 300 Hz bandpass, referenced to 2.83V
 (3) Maximum SPL calculated from sensitivity and power handling specifications, exclusive of power compression
 (4) Bose extended-lifecycle test using pink noise filtered to meet IEC268-5, 6-dB crest factor, 500-hour duration
 (5) AES standard 2-hour duration with IEC system noise

Additional Information

Refer to the owner's guide (online at pro.Bose.com) for more information about your product (including accessories and replacement parts). To request a printed copy, use the phone numbers provided.

Neutrik® is a registered trademark of Neutrik AG.

Limited Warranty

Your product is covered by a limited warranty. Visit pro.Bose.com for warranty details.

The warranty information provided with this product does not apply in Australian and New Zealand. See our website at www.bose.com/au/warranty or www.bose.com/nz/warranty for details of the Australian and New Zealand warranty.

Date of Manufacture

The eighth digit in the serial number indicates the year of manufacture; "6" is 2006 or 2016.

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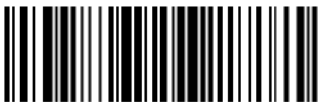
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