**BEFORE YOU BEGIN**

The MRX500 speakers covered by this manual are not intended for fixed installation in outdoor or high moisture environments. Moisture can damage the speaker cone and surround and cause corrosion of electrical contacts and metal parts. Avoid exposing the speakers to direct moisture. Keep speakers out of extended or intense direct sunlight. The driver suspension will prematurely dry out and finished surfaces may be degraded by long-term exposure to intense ultra-violet (UV) light.

MRX500 speakers can generate considerable energy. When placed on a slippery surface such as polished wood or linoleum, the speaker may move due to its acoustical energy output. Precautions should be taken to assure that the speaker does not fall off a stage or table on which it is placed.

**Stand mounting safety precautions**

Some MRX500 models include a 35 mm receptacle cup to allow mounting on tripod stands or on a pole over subwoofers. When using stands or poles, be sure to observe the following precautions:

- Check the stand or pole specification to be certain the device is designed to support the weight of the speaker. Observe all safety precautions specified by the manufacturer.
- Always verify that the stand (or subwoofer / pole) is placed on a flat, level, and stable surface and be sure to fully extend the legs of tripod type stands. Position the stand so that the legs do not present a trip hazard.
- Route cables so that performers, production crew, and audience will not trip and topple the speakers over. Inspect the stand (or pole and associated hardware) before each use and do not use equipment with worn, damaged, or missing parts.
- Do not attempt to place more than one MRX500 speaker on a stand or pole.
- Always be cautious in windy, outdoor conditions. It may be necessary to place additional weight (i.e., sand bags) on the base of the stand to improve stability. Avoid attaching banners or similar items to any part of a speaker system. Such attachments could act as a sail and topple the system.
- Unless you are confident that you can handle the weight of the speaker, ask another person to help you get it onto the tripod stand or pole.

**Hearing damage, prolonged exposure to excessive SPL**

MRX500 loudspeakers are easily capable of generating sound pressure levels (SPL) sufficient to cause permanent hearing damage to performers, production crew and audience members. Caution should be taken to avoid prolonged exposure to SPL in excess of 90 dB.

**SPECIFICATIONS**

MRX512M - 12\(^\prime\), two-way, bass-reflex, utility / monitor speaker

- **Frequency Range (-10 dB):** 60 Hz - 20 kHz
- **Frequency Response (±3 dB):** 60 Hz - 20 kHz
- **Coverage Pattern:** 70º x 70º nominal
- **Crossover Mode:** Passive
- **Crossover Frequency:** 1.7 kHz
- **Power Rating:** 400 W / 800 W / 1600 W, 2 hrs
  - Continuous / Program / Peak
- **Maximum SPL:** 123 dB SPL continuous (129 dB SPL peak)
- **System Sensitivity (1w @ 1m):** 97 dB SPL
- **LF Driver:** 1 x JBL 262H 305 mm (12 in) Differential Drive® woofer
- **HF Driver:** 1 x JBL 2408H 37.5 mm (1.5 in) annular polymer diaphragm, neodymium compression driver
- **Nominal Impedance:** 8 ohms
- **Enclosure:** Symmetrical stage monitor, 15/18 mm, plywood.
- **Suspension/Mounting:** Dual-angle (0° or -10°), 35 mm pole socket
- **Transport:** Integrated handle / input cup
- **Finish:** Black DuraFlex™ finish
- **Grille:** Powder coated, black, 16 gauge perforated steel with acoustically transparent black screen backing
- **Input Connectors:** Neutrik® Speakon® NL-4 (x2), one on each end
- **Dimensions (H x W x D):** 645 mm x 380 mm x 345 mm (25.25 in x 15.0 in x 13.5 in)
- **Net Weight:** 14.9 kg (33 lb)
- **Optional Accessories:** SS3-BK: Tripod speaker stand SS3-8K: Satellite speaker pole

MRX515 - 15\(^\prime\) two-way, bass-reflex

- **Frequency Range (-10 dB):** 55 Hz - 20 kHz
- **Frequency Response (±3 dB):** 55 Hz - 20 kHz
- **Coverage Pattern:** 70º x 70º nominal
- **Crossover Mode:** Passive
- **Crossover Frequency:** 1.7 kHz
- **Power Rating:** 400 W / 800 W / 1600 W, 2 hrs
  - Continuous / Program / Peak
- **Maximum SPL:** 123 dB SPL continuous (129 dB SPL peak)
- **System Sensitivity (1w @ 1m):** 96 dB SPL
- **LF Driver:** 1 x JBL 265H 380 mm (15 in) Differential Drive® woofer
- **HF Driver:** 1 x JBL 2408H 37.5 mm (1.5 in) annular polymer diaphragm, neodymium compression driver
- **Nominal Impedance:** 8 ohms
- **Enclosure:** Trapezoidal, 15/18 mm, plywood
- **Suspension/Mounting:** Dual-angle (0° or -10°), 35 mm pole socket
- **Transport:** 2 x 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:** Neutrik® Speakon® NL-4 (x2), one on each end
- **Dimensions (H x W x D):** 700 mm x 435 mm x 470 mm (27.25 in x 17.5 in x 18.5 in)
- **Net Weight:** 19.5 kg (43 lb)
- **Optional Accessories:** SS3-BK: Tripod speaker stand SS3-8K: Satellite speaker stand

1. IEC standard, full bandwidth pink noise with 6 dB crest factor for specified period
2. Calculated based on power rating and sensitivity

**MRX512S**
**MRX528S**
**MRX525**
**MRX515**
**MRX512M**
**MRX525 - Dual 15”, two-way, bass-reflex**

- **Frequency Range (-10 dB):** 40 Hz - 20 kHz
- **Frequency Response (+3 dB):** 57 Hz - 20 kHz
- **Coverage Pattern:** 70º x 70º nominal
- **Crossover Mode:** Passive
- **Crossover Frequency:** 1.8 kHz
- **Power Rating:**
  - 800 W / 1600 W / 3200 W, 2 hrs
  - 500 W / 1000 W / 2000 W, 2 hrs
- **Maximum SPL:** 127 dB SPL continuous (133 dB SPL peak)
- **System Sensitivity:**
  - 2 x JBL 265H 380 mm (15 in) Differential Drive® woofers
  - 1 x JBL 2408H 37.5 mm (1.5 in) annular polymer diaphragm, neodymium compression driver
- **Nominal Impedance:** 4 ohms
- **Enclosure:** Trapezoidal, 15/18 mm, plywood
- **Finish:** Black DuraFlex™ finish
- **Grille:** Powder coated, black, 16-gauge perforated steel with acoustically transparent black screen backing.
- **Input Connectors:** Neutrik® Speakon® NL-4 (x2)
- **Dimensions (H x W x D):** 1240 mm x 535 mm x 460 mm; (48.75 in x 21.0 in x 18.0 in)
- **Net Weight:** 38.2 kg (84 lb)

**MRX528S - Dual 18” bass-reflex subwoofer**

- **Frequency Range (-10 dB):** 40 Hz - 20 kHz
- **Frequency Response (+3 dB):** 40 Hz - 20 kHz
- **Input Connection Modes:** Internally configurable, +1/-1 or +2/-2
- **Recommended Crossover Frequencies:**
  - 80-120 Hz, 24-48 dB/octave HPF
- **Power Rating:**
  - 800 W / 1600 W / 3200 W, 100 hrs
  - 700 W / 1400 W / 2800 W, 100 hrs
- **Maximum SPL:** 129 dB SPL continuous (135 dB SPL peak)
- **System Sensitivity:**
  - 100 dB SPL
  - 94 dB SPL, 100 dB SPL
- **LF Driver:**
  - 2 x JBL 365H 380 mm (15 in) Differential Drive® woofers
  - 1 x JBL 2408H 37.5 mm (1.5 in) annular polymer diaphragm, neodymium compression driver
- **Nominal Impedance:** 4 ohms
- **Mounting:** Top mounted 35 mm socket for optional SS3-BK pole
- **Enclosure:** Rectangular, 18 mm, plywood
- **Finish:** Black DuraFlex™ finish
- **Grille:** Powder coated, black, 16-gauge perforated steel with acoustically transparent black screen backing.
- **Input Connectors:** Neutrik® Speakon® NL-4 (x2)
- **Dimensions (H x W x D):** 1095 mm x 535 mm x 700 mm (43 in x 21 in x 27.5 in)
- **Net Weight:** 32.5 kg (72 lb)

**Infrasonic Filter Settings**

It is a good practice to use a High Pass Filter (HPF) to prevent frequencies below the system tuning frequency from reaching the speaker. Inputting these frequencies to the speaker will not result in any appreciable acoustic output but will put needless mechanical stress on the woofer and reduce available amplifier headroom. A High Pass Filter will protect your MRX500 system from excess infrasonic energy with little, if any loss of significant program content. Refer to the above chart for infrasonic filter settings.

**Recommended Amplifier Power**

<table>
<thead>
<tr>
<th>Model</th>
<th>Recommended Amplifier Power</th>
<th>Infrasonic Filter Settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>MRX512M</td>
<td>800 to 1,600W @8Ω</td>
<td>800 to 1,600W @8Ω</td>
</tr>
<tr>
<td>MRX515</td>
<td>1,600 to 3,200W @4Ω</td>
<td>1,600 to 3,200W @4Ω</td>
</tr>
<tr>
<td>MRX518S</td>
<td>1,000 to 2,000W @8Ω</td>
<td>1,000 to 2,000W @8Ω</td>
</tr>
<tr>
<td>MRX528S</td>
<td>2,000 to 4,000W @4Ω</td>
<td>2,000 to 4,000W @4Ω</td>
</tr>
</tbody>
</table>

- 1 40 Hz to 400 Hz pink noise with 6 dB crest factor for specified period
- 2 Calculated on half space condition

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**MRX518S - 18” bass-reflex subwoofer**

- **Frequency Range (-10 dB):** 40 Hz - 200 Hz
- **Frequency Response (+3 dB):** 40 Hz - 200 Hz
- **Input Connection Modes:**
  - Internally configurable, +1/-1 or +2/-2
  - Internally configurable, +1/-1
- **Recommended Crossover Frequencies:**
  - 80-120 Hz, 24-48 dB/octave HPF
  - 80-120 Hz, 24-48 dB/octave HPF
- **Power Rating:**
  - 950 W / 1000 W / 2000 W, 2 hrs
  - 400 W / 800 W / 1600 W, 100 hrs
- **Maximum SPL:** 127 dB SPL continuous (133 dB SPL peak)
- **System Sensitivity:**
  - 94 dB SPL, 100 dB SPL
  - 94 dB SPL, 100 dB SPL
- **LF Driver:**
  - 1 x JBL 2440H 457 mm (18 in) woofer
  - 1 x JBL 2440H 457 mm (18 in) woofer
- **Nominal Impedance:** 4 ohms
- **Enclosure:** Rectangular, 18 mm, birch plywood
- **Finish:** Black DuraFlex™ finish
- **Grille:** Powder coated, black, 16-gauge perforated steel with acoustically transparent black screen backing.
- **Input Connectors:** Neutrik® Speakon® NL-4 (x2)
- **Dimensions (H x W x D):** 560 mm x 535 mm x 700 mm (22 in x 21 in x 27.5 in)
- **Net Weight:** 32.5 kg (72 lb)

**Recommended Amplifier Power**

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</tr>
</tbody>
</table>

- 1 40 Hz to 400 Hz pink noise with 6 dB crest factor for specified period
- 2 Calculated on half space condition

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**SPECIFICATIONS**

- MRX525 - Dual 15”, two-way, bass-reflex
- MRX528S - Dual 18” bass-reflex subwoofer
- MRX518S - 18” bass-reflex subwoofer

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**Infrasonic Filter Settings**

It is a good practice to use a High Pass Filter (HPF) to prevent frequencies below the system tuning frequency from reaching the speaker. Inputting these frequencies to the speaker will not result in any appreciable acoustic output but will put needless mechanical stress on the woofer and reduce available amplifier headroom. A High Pass Filter will protect your MRX500 system from excess infrasonic energy with little, if any loss of significant program content. Refer to the above chart for infrasonic filter settings.
DuraFlex™ Finish
The DuraFlex finish used on your MRX500 series speakers is one of the most rugged finishes ever applied to a speaker. However, all speaker finishes are subject to damage. Should the DuraFlex finish require repair, a touch-up kit (Part Number 16677) is available from JBL Professional Parts.

Single Box On Pole Coverage
The dual angle pole socket on the MRX512M and MRX515 provides flexibility in aiming the speaker. As a general rule, the speaker should be positioned so that the audience cannot see the top or bottom panels of the speaker. When using stands or poles, be sure to observe the following precautions:

- Check the stand or pole specification to be certain the device is designed to support the weight of the speaker. Observe all safety precautions specified by the manufacturer.
- Be certain that the surface on which the system is to be stacked is flat, stable and solid.
- Route cables so that performers, production crew and audience will not trip and topple the speakers.
- Inspect the stand (or pole and assorted hardware) before each use and do not use equipment with worn, damaged or missing parts.
- Always be cautious when deploying the system outdoors. Unexpected winds may topple a system. It may be necessary to place additional weight (i.e. sandbags) on the base of the stand to improve stability. Avoid attaching banners or similar items to any part of the speaker system. Such attachments could act as a sail and topple the system.
- Unless you are confident that you can handle the weight of the speaker, ask another person to help you get it onto the stand or pole.
*MRX512M: Input panel has the same number of connectors, but are located at either end of the enclosure.
**Speaker Cables**

- **1/4" Phone to NL-4**
- **Dual Banana to NL-4**
- **NL-4 to NL-4 (with 2-conductor cable)**
- **NL-4 to NL-4 (with 4-conductor cable)**

**Minimum Wire Size for 0.5 dB Loss**

![Graph showing wire size vs. length for different resistances](image)

**JBL LIMITED WARRANTY**

The JBL Limited Warranty on professional loudspeaker products (except for enclosures) remains in effect for five years from the date of the first consumer purchase. JBL amplifiers are warranted for three years from the date of original purchase. Enclosures and all other JBL products are warranted for two years from the date of original purchase.

**Who is Protected by This Warranty?**  
Your JBL Warranty protects the original owner and all subsequent owners so long as: A. Your JBL product has been purchased in the Continental United States, Hawaii or Alaska. (This Warranty does not apply to JBL products purchased elsewhere except for purchases by military outlets. Other purchasers should contact the local JBL distributor for warranty information.); and B. The original dated bill of sale is presented whenever warranty service is required.

**What does the JBL Warranty cover?**  
Except as specified below, your JBL Warranty covers all defects in material and workmanship. The following are not covered: Damage caused by accident, misuse, abuse, product modification or neglect; damage occurring during shipment; damage resulting from failure to follow instructions contained in your Instruction Manual; damage resulting from the performance of repairs by someone not authorized by JBL; claims based upon any misrepresentations by the seller; any JBL product on which the serial number has been defaced, modified or removed.

**Who Pays for What?**  
JBL will pay all labor and material expenses for all repairs covered by this warranty. Please be sure to save the original shipping cartons because a charge will be made if replacement cartons are requested. Payment of shipping charges is discussed in the next section of this warranty.

**How to Obtain Warranty Performance**  
If your JBL product ever needs service, write or telephone us at JBL Incorporated (Attn: Customer Service Department), 8500 Balboa Boulevard, P.O. Box 2200, Northridge, California 91329 (818/893-8411). We may direct you to an authorized JBL Service Agency or ask you to send your unit to the factory for repair. Either way, you'll need to present the original bill of sale to establish the date of purchase. Please do not ship your JBL product to the factory without prior authorization. If transportation of your JBL product presents any unusual difficulties, please advise us and we may make special arrangements with you. Otherwise, you are responsible for transporting your product for repair or arranging for its transportation and for payment of any initial shipping charges. However, we will pay the return shipping charges if repairs are covered by the warranty.

**Limitation of Implied Warranties**

ALL IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE LENGTH OF THIS WARRANTY.

**Exclusion of Certain Damages**

JBL's liability is limited to the repair or replacement, at our option, of any defective product and shall not include incidental or consequential damages of any kind. Some states do not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion of incidental or consequential damages, so the above limitations and exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights, which vary, from state to state.
Mailing Address:
JBL Professional
8500 Balboa Blvd.
Northridge, CA 91329

Shipping Address:
JBL Professional
8370 Balboa Blvd., Dock D
Northridge, CA 91329
(Do not return product to this address without first obtaining prior authorization from JBL)

Customer Service:
Monday through Friday
8:00am - 5:00pm
Pacific Coast Time in the U.S.A.
(800) JBLPRO (800.852.5776)
www.jblproservice.com

On the World Wide Web:
www.jblpro.com

Outside the USA:
Contact the JBL Professional Distributor in your area. A complete list of JBL Professional international distributors is provided at our U.S.A. website - www.jblpro.com

Product Registration:
Register your product online at www.jblpro.com/registration