<table>
<thead>
<tr>
<th>CONTENTS (ENGLISH)</th>
<th>Page No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 INTRODUCTION</td>
<td>2</td>
</tr>
<tr>
<td>2 UNPACKING</td>
<td>2</td>
</tr>
<tr>
<td>3 OVERVIEW</td>
<td>2</td>
</tr>
<tr>
<td>4 AMPLIFICATION</td>
<td>3</td>
</tr>
<tr>
<td>5 CONNECTIONS</td>
<td>3</td>
</tr>
<tr>
<td>6 CABLE LENGTHS</td>
<td>4</td>
</tr>
<tr>
<td>7 WARRANTY</td>
<td>4</td>
</tr>
<tr>
<td>8 TECHNICAL SPECIFICATIONS</td>
<td>5</td>
</tr>
</tbody>
</table>
1 INTRODUCTION

Thank you for purchasing a Martin Audio LE Series monitor. LE Series monitors have always set the industry standard for touring and stage applications. All LE Series monitors except the LE400C utilise differential dispersion horn technology to define a high frequency coverage footprint that is particularly useful for stage monitor applications.

2 UNPACKING

Each Martin Audio loudspeaker is built to the highest standard and thoroughly inspected before it leaves the factory. After unpacking the system, examine it carefully for any signs of transit damage and inform your dealer if any such damage is found. It is suggested that you retain the original packaging so that the system can be repacked at a future date if necessary. Please note that Martin Audio and its distributors cannot accept any responsibility for damage to any returned product through the use of non-approved packaging.

3 OVERVIEW

The LE12JB is a two-way active/passive switchable, multi-angled enclosure fitted with a high sensitivity 12" (305mm) / 3" (75mm) coil driver handling low frequencies up to the 1.3kHz crossover point. High frequencies are reproduced by a 1.4" (35mm) exit titanium diaphragm compression driver loaded by a proprietary differential dispersion 50˚-100˚ horizontal x 70˚ vertical horn.

The differential dispersion horn varies its horizontal dispersion from wide to narrow as the performer moves back from the monitor. This narrowing dispersion effectively changes the forward gain of the horn which enables the horn to throw further, increasing the operating range of the monitor and reducing excess spill. As the performer moves closer to the monitor the dispersion widens giving the performer the ability to hear themselves clearly even when positioned directly above or to the left or right of the monitor.

The multi-angled enclosure is of multi-laminate birch ply construction and is available in left and right-handed versions. Incorporating a tough punched
steel grille and recessed side handles, the cabinet is finished in black textured paint.

When operated in passive mode the LE12JB can be used without a controller. Used actively the LE12JB is best operated with DX1 or MX5 controllers to provide crossover, limiting and eq functions. In either mode sound quality is consistent, enabling mixing of configurations on stage, without the need to compensate for differing tonal balance. When using the LE12JB in active mode performance is identical to its predecessor, the LE12J. A retro-fit kit is available to upgrade this model.

### 4 AMPLIFICATION

The LE12JB is designed to be used with professional power amplifiers capable of producing 500-700W into 4 ohms:

Care should be taken to avoid amplifier clipping. It is important to understand that a low power amplifier driven into clipping is more likely to damage a loudspeaker than a higher power amplifier used within its ratings. This is because music signals have a high peak-to-average "crest" factor. When an amplifier is severely overdriven, its output waveform is clipped (its peaks are squared off) – reducing the crest factor. In extreme cases, the waveform can approach that of a square wave. An amplifier is normally capable of producing far more power under these conditions than its undistorted rated power output.

The use of very high power amplifiers with outputs greater than those recommended is discouraged.

Care should be taken to avoid switch-on surges, which can result in momentary power peaks in excess of specified ratings. When powering up a sound system it is important to switch on the amplifiers after the mixer and control electronics have stabilised. When powering down the system, reverse the sequence and switch off the amplifiers first.

### 5 CONNECTIONS

The LE12JB is fitted with two Neutrik Speakon NL4 connectors wired in parallel. Do not make a connection to +2, -2 when using the LE12JB in passive mode.

<table>
<thead>
<tr>
<th>NL4</th>
<th>LE12JB Passive</th>
<th>LE12JB Active</th>
</tr>
</thead>
<tbody>
<tr>
<td>-1</td>
<td>Input -</td>
<td>LF -</td>
</tr>
<tr>
<td>+1</td>
<td>Input +</td>
<td>LF +</td>
</tr>
<tr>
<td>-2</td>
<td>N/C</td>
<td>HF -</td>
</tr>
<tr>
<td>+2</td>
<td>N/C</td>
<td>HF +</td>
</tr>
</tbody>
</table>
6 CABLE LENGTHS

When connecting loudspeaker systems to an amplifier, it is recommended that the return resistance of the cable used is less than one tenth of the nominal impedance of the system or systems in parallel. The table below gives an indication of the maximum permissible cable runs for various conductor cross-sectional areas.

<table>
<thead>
<tr>
<th>Conductor CSA</th>
<th>4 ohms</th>
<th>8 ohms</th>
<th>16 ohms</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0mm²</td>
<td>11m</td>
<td>22m</td>
<td>44m</td>
</tr>
<tr>
<td>1.5mm²</td>
<td>17m</td>
<td>34m</td>
<td>68m</td>
</tr>
<tr>
<td>2.0mm²</td>
<td>22m</td>
<td>44m</td>
<td>88m</td>
</tr>
<tr>
<td>2.5mm²</td>
<td>29m</td>
<td>58m</td>
<td>116m</td>
</tr>
<tr>
<td>4.0mm²</td>
<td>44m</td>
<td>88m</td>
<td>176m</td>
</tr>
<tr>
<td>6.0mm²</td>
<td>66m</td>
<td>132m</td>
<td>264m</td>
</tr>
</tbody>
</table>

7 WARRANTY

Martin Audio LE12JB monitors are warranted against manufacturing defects in materials or craftsmanship over a period of 5 years from the date of original purchase. During the warranty period Martin Audio will, at its discretion, either repair or replace products which prove to be defective provided that the product is returned in its original packaging, shipping prepaid, to an authorised Martin Audio service agent or distributor.

Martin Audio Ltd. cannot be held responsible for defects caused by unauthorised modifications, improper use, negligence, exposure to inclement weather conditions, act of God or accident, or any use of this product that is not in accordance with the instructions provided by Martin Audio. Martin Audio is not liable for consequential damages.

This warranty is exclusive and no other warranty is expressed or implied. This warranty does not affect your statutory rights.
LE12JB

TYPE
Two-way reflex enclosure with differential dispersion HF horn

FREQUENCY RESPONSE (1)
65Hz-18kHz ±3dB

DRIVERS
12” (305mm) dia. 3” (75mm) voice coil
1.4” (35mm) exit compression driver

RATED POWER (2)
FR/LF: 300W AES, 1200W peak.
HF: 75W AES, 300W peak.

RECOMMENDED AMPLIFIER
500-700W into 4 ohms

SENSITIVITY (3)
FR: 97dB 1 Watt/1 metre
LF: 98dB 1 Watt/1 metre
HF: 106dB 1 Watt/1 metre

MAXIMUM SPL (4)
FR: 120dB continuous, 126dB peak
LF: 121dB continuous, 127dB peak
HF: 124dB continuous, 130dB peak

IMPEDANCE
FR: 8 ohms nominal
LF: 8 ohms nominal
HF: 16 ohms nominal

CROSSOVER
1.3 kHz passive/active

DISPERSION (-6dB)
50˚-100˚ horizontal, 70˚ vertical

ENCLOSURE
38 litre (1.3cu foot)
multi-laminate birch ply

FINISH
Textured black paint

PROTECTIVE GRILLE
Black perforated steel

CONNECTORS
2 x Neutrik NL4

FITTINGS
2 x recessed side handles

DIMENSIONS
(W) 607mm x (H) 343mm x (D) 434mm
(W) 23.9ins x (H) 13.5ins x (D) 17.1ins

WEIGHT
27.5kg (60lbs)

SHIPPING DIMENSIONS
(W) 710mm x (H) 420mm x (D) 510mm
(W) 28ins x (H) 16.5ins x (D) 20.1ins

SHIPPING WEIGHT
29.8kg (66lbs)

Notes
1. Measured on-axis in half space at 2 metres, then referred to 1 metre.
3. Measured in half space conditions at 2 metres with 1 watt input, using band limited pink noise, then referred to 1 metre.
4. Measured in half space conditions at 2 metres using band limited pink noise, then referred to 1 metre.

Due to our policy of continuous improvement all specifications are subject to change without notice.
LE12JB Series Monitor

Please Click here to return to main menu

Please Click here to visit our website