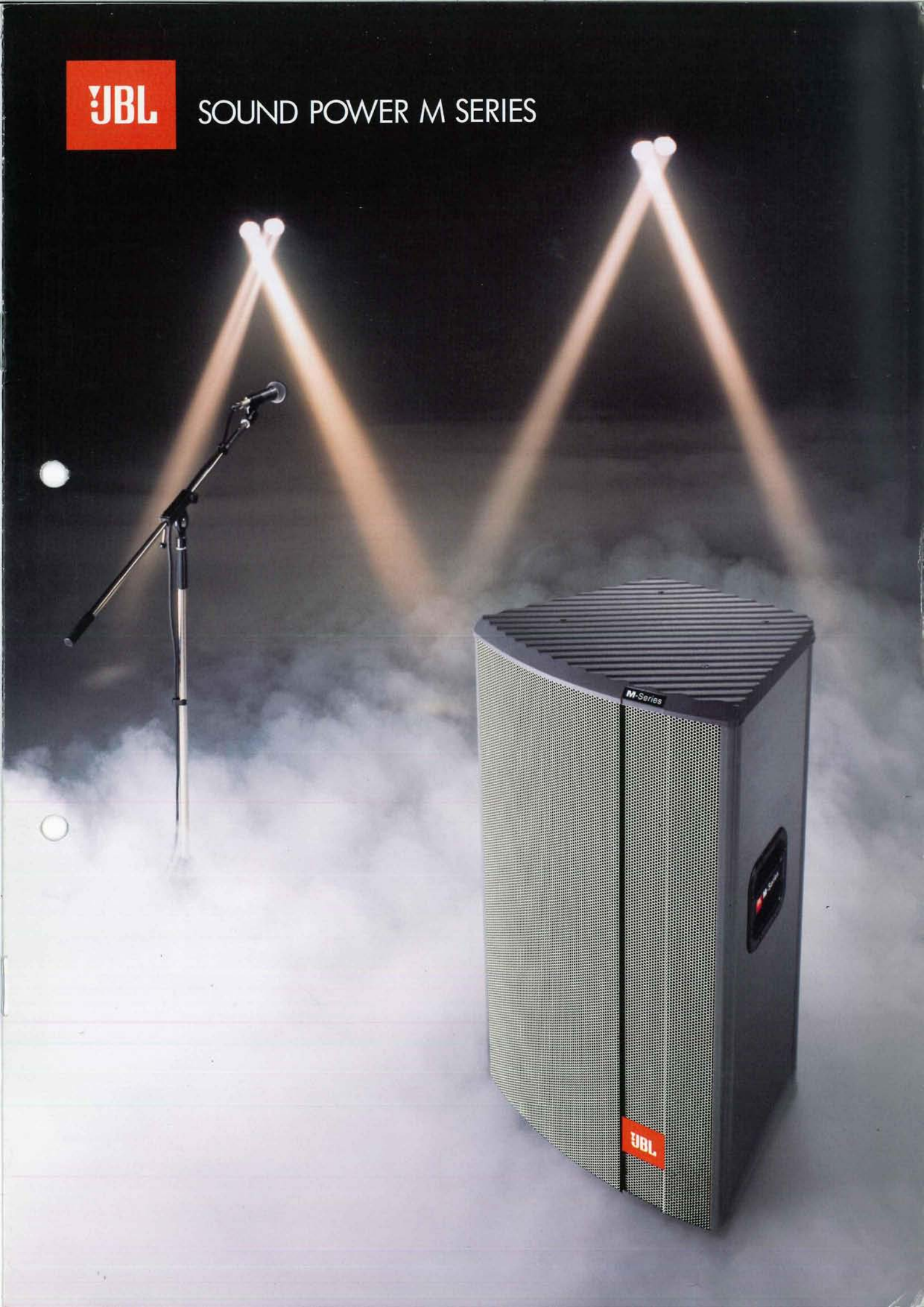




SOUND POWER M SERIES



As the expertise expected of the working musician becomes more complex, and the performance standards demanded by audiences become ever more sophisticated, JBL is continuously defining the materials, technologies and systems engineering required to meet the challenges. As a working musician, you need the same level of technology and innovation that has made JBL the choice of the world's leading performers and touring sound reinforcement companies, and you need it in a highly portable configuration.

Meet the JBL Sound Power M Series. Serious loudspeakers derived from the heart of the professional sound business and designed to meet the needs of today's musician. JBL Sound Power M Series is detailed, efficient and modular, designed to grow as you grow without obsoleting your initial system. The sound is clean,

contemporary and powerful. It is the sound that has touring professionals and major installations using JBL night after night.

The Sound Power M Series offers you all of the benefits of JBL's recent advances in loudspeaker technologies, including Selective Harmonic Geometry (SHG™), Thermoset Composite™ coils, and new adhesive technologies applied to performance-proven pure titanium high frequency compression drivers. All models feature sophisticated annular slit compression driver phasing plugs and high performance horns, which are like the JBL components used in much more expensive professional touring systems.

JBL Sound Power M Series. Designed by and for working professionals.

## THE SOUND – AND NOTHING BUT

The general public's perception of high quality sound has increased in recent years.

Electronic instruments and samplers have become more sophisticated; the frequencies they generate are getting both lower and higher, so you need a loudspeaker that can handle a full frequency range at high levels. But, at the same time, if you are amplifying acoustic instruments, you don't want the subtlety and detail to be masked or colored.

JBL Sound Power M Series provided us with a fresh challenge, so we built dedicated new transducers especially for the M Series.

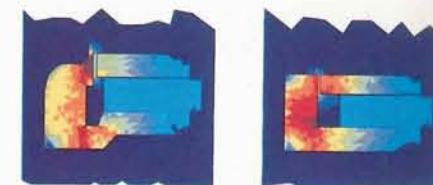
The 12 inch and 15 inch woofers in the Sound Power M Series use heavy duty cast frames similar to those fitted to our Sound Power A Series. New cone, magnet and voice-coil designs have allowed us to produce very high sensitivity drivers (giving you more output) while maintaining a high degree of linearity, low distortion and high power handling.

The harder you drive a loudspeaker the hotter it gets. And, as it becomes hotter, its output decreases, while some forms of distortion increase. This phenomenon is called, *power compression*. Power compression is usually most audible in low frequency drivers.

JBL was able to greatly reduce the power compression of Sound Power M low-frequency components by combining a massive, heat-dissipating magnet structure with a specially designed, heat-exhausting rear vent. This structure, when combined with the ruggedness and power handling of the Thermoset Composite™ voice coil

assembly, ensures high acoustic output and unparalleled reliability under the heaviest demand. Even when the voice coil is operating at 300°C (not uncommon for a professional loudspeaker), the effects of power compression are minimized. The heat is continuously transported away from the voice coil, maintaining thermal equilibrium and peak performance even under ongoing high sound pressure output.

A new mid-range and tweeter have been developed for the three-way system, and JBL's renowned titanium compression driver technology is used in the two-way systems. Compression drivers are the most efficient way to produce high frequencies at high levels. Coupled to a horn, a compression driver represents the professional's choice.



**Selective Harmonic Geometry (SHG™)**  
Computerized modelling of magnet assemblies, comparing the new JBL SHG™ to a typical competitive product. The dark violet color represents the greatest concentration of magnetic energy. 2nd and 3rd order harmonic distortion elements are selectively suppressed and controlled via the symmetrical distribution of magnetic energy across the entire gap of the SHG™ system.



## THE CROSSOVER – LIFE ASSURANCE FOR YOUR LOUDSPEAKERS

The crossover is just as important as any other part of the system. It splits the high and low frequency energy in the correct proportions to the appropriate transducers. It also serves as a protection circuit for the more delicate high frequency units which can be inadvertently damaged through overload or amplifier clipping.

The connector panel carries two 4-pin Speakon® connectors. These high-grade, specialist loudspeaker connectors are versatile and reliable. One socket provides an input to the system and the second allows loop through to a further cabinet (assuming the amplifier can comply with the resulting load impedance).



## THE ENCLOSURE – WHERE FORM MEETS FUNCTION

It's easy to build a box and fill it up with loudspeakers, but with Sound Power M Series enclosures, we've applied another idea from the tour-sound industry. Many of JBL's professional cabinets are "trapezoidal" in shape. In touring applications this is done to allow the system to "array" properly, providing optimum acoustical coverage. With Sound Power M Series, the coverage principles are the same; the trapezoidal shape lets you properly "splay" the boxes in a stacked array. And to facilitate stacking, the top and bottom of each JBL Sound Power M Series cabinet is finished with a heavy-duty ABS plastic end cap, which gives better strength and stability than traditional corner protectors.

The ribbed pattern on the end caps has been specially designed to allow enclosures of any size to stack and locate securely, with maximum flexibility. The curved steel grille, which is an integral part of the cabinet structure, is internally braced for maximum rigidity.

JBL Sound Power M Series cabinets are constructed from medium density board, providing a high level of acoustical damping which, in turn, eliminates undesirable internal cabinet resonances.

All cabinets incorporate a 35 mm European stand mount adaptor.

## HANDLING

Another important factor in the design of the JBL Sound Power M Series was to ensure that the loudspeakers were as easy as possible for the user to handle. By designing and placing the handles at the exact center of gravity, the box is better balanced and easier to lift.

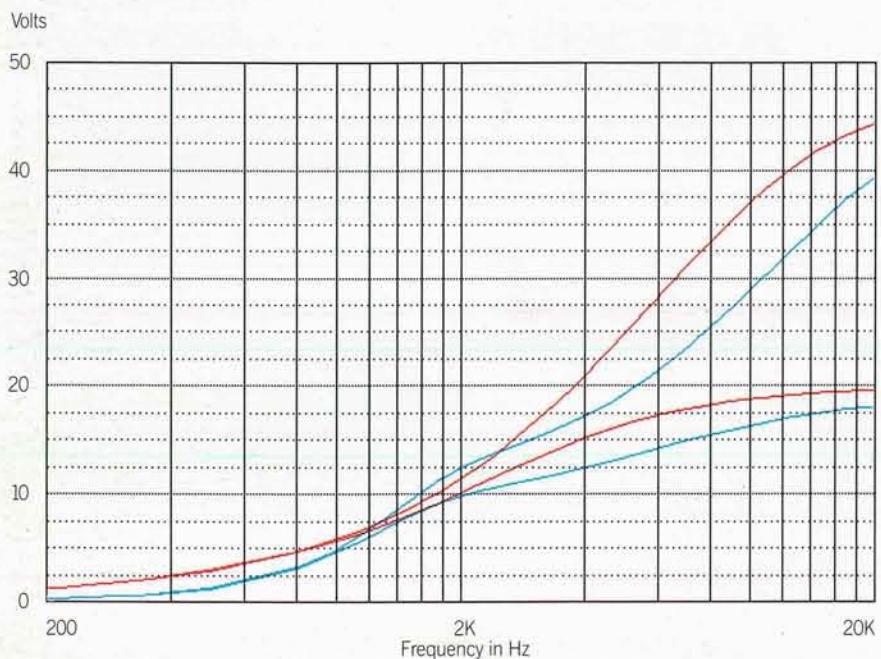
With JBL Sound Power M Series, we are bringing JBL quality, performance and reliability to you.

### Protection of high frequency drivers:

Blue curves: Compression driver horn.

Red curves: Horn loaded tweeter.

Curves 1 and 2 show voltage vs frequency at the high frequency devices before and during protection under maximum power conditions.



## PRODUCT SPECIFICATIONS

### JBL M330

The JBL M330 is a two way full-range loudspeaker system designed especially for musician use, as a small vocal-reinforcement or portable PA system where high quality and portability are of prime importance.

The unit uses a JBL 300 mm (12 in) high power, high efficiency woofer for low-frequency reproduction, with a JBL one inch titanium diaphragm compression driver and Bi-Radial® horn handling high frequencies.

The connector panel carries two 4-pin Speakon® connectors. These high-grade specialist loudspeaker connectors are versatile and reliable. One socket provides an input to the system and the second allows loop through to a further cabinet.

The M330 is finished in a heavy duty grey vinyl wrap. Corner protection is achieved by using fully moulded end caps top and bottom. The end caps also provide the method for secure stacking with a second M330 (or other model in the JBL Sound Power M range), using a series of ribs incorporated into the material. Two carrying handles are located in the sides of the cabinet, while the base incorporates a standard 35 mm pole-mount location. A full steel grille covers the face of the M330 to prevent any component damage while on the road; this grille is reinforced to prevent unwanted resonance and locates under the moulded end caps.

The M330 can be used with JBL's existing MTA range of mounting hardware. The MTA 21465 is a high quality tripod stand which will directly accept a single M330. The MTA 21300 is a crank-up version of the MTA 21465, allowing heavy loudspeaker loads to be easily lifted using a handle on the side of the stand. An additional Tilt Adaptor – the MTA 19670 – is available to allow easy downward adjustment of a single loudspeaker.

### JBL M350

The JBL M350 is a two way full-range loudspeaker, designed for use as a small touring PA or backline system in situations where sound quality, efficiency and ease-of-use are critical.

For bass frequencies, the system uses a JBL 380 mm (15 in) high power, high efficiency cone transducer. High frequencies are handled by a one inch titanium diaphragm compression driver and Bi-Radial® horn.

The connector panel carries two 4-pin Speakon® connectors. These high-grade specialist loudspeaker connectors are versatile and reliable. One socket provides an input to the system and the second allows loop through to a further cabinet.

The M350 is finished in a heavy duty grey vinyl wrap. Corner protection is achieved by using fully moulded end caps top and bottom. These end caps also provide the method for secure stacking on a second M350 (or other model in the JBL Sound Power M range), using a series of ribs incorporated into the moulding. A carrying handle is fitted to each side of the cabinet, while the base incorporates a standard 35 mm pole-mount location. A full steel grille covers the face of the M350 to prevent any component damage while on the road; this grille is reinforced to obviate unwanted resonance and it locates under the end caps.

The M350 can be used with JBL's existing MTA range of mounting hardware. The MTA 21465 is a high quality tripod stand which will directly accept a single M350. The MTA 21300 is a crank-up version of the MTA 21465, allowing heavy loudspeaker loads to be easily lifted using a handle on the side of the stand. An additional Tilt Adaptor – the MTA 19670 – is available to allow easy downward adjustment of a single loudspeaker.

### JBL M360

The JBL M360 is a three way full-range loudspeaker system specifically designed for bands and musicians on the road. It will perform equally well as a high quality PA system, keyboard monitor or sidefill loudspeaker.

The M360 employs a JBL 380 mm (15 in) high power, high efficiency woofer for clean, accurate bass response. A 200 mm (8 in) high efficiency mid-range transducer and a horn-loaded tweeter handle the higher frequencies.

The connector panel carries two 4-pin Speakon® connectors. These high-grade specialist loudspeaker connectors are versatile and reliable. One socket provides an input to the system and the second allows loop through to a further cabinet.

The M360 is finished in a heavy duty grey vinyl wrap. Corner protection is achieved by using fully moulded end caps top and bottom. These end caps also provide the method for secure stacking with a second M360 (or other model in the JBL Sound Power M range), using a series of ribs incorporated into the material. A carrying handle is recessed into each side of the cabinet, while the base incorporates a standard 35 mm pole-mount location. A full steel grille covers the face of the M360 to prevent any component damage while on the road; this grille is reinforced to prevent unwanted resonance and it locates under the moulded end caps.

The M360 can be used with JBL's existing MTA range of mounting hardware. The MTA 21465 is a high quality tripod stand which will directly accept a single M360. The MTA 21300 is a crank-up version of the MTA 21465, allowing heavy loudspeaker loads to be easily lifted using a handle on the side of the stand. An additional Tilt Adaptor – the MTA 19670 – is available to allow easy downward adjustment of a single loudspeaker.

## SPECIFICATIONS



|  | M330   | M350   | M360   |
|--|--|--|--|
| Frequency Range (-10 dB):  | 45 Hz – 18 kHz   | 32 Hz – 18 kHz   | 35 Hz – 22 kHz                                 |
| Power Capacity:<br>(Continuous Pink Noise)<br>(Peak Pink Noise)* | 350 W<br>1400 W  | 350 W<br>1400 W  | 350 W<br>1400 W                                |
| Nominal Impedance:   | 8 ohms   | 8 ohms   | 8 ohms   |
| Sensitivity (2.83 V, 1 m)  | 99 dB  | 99 dB  | 99 dB  |
| Maximum Continuous SPL**   | 124 dB   | 124 dB   | 124 dB   |
| Nominal Dispersion   | 90°H x 40°V  | 90°H x 40°V  | –  |
| Crossover Frequency  | 1250 Hz  | 1100 Hz  | 950 Hz, 4.5 kHz                                |
| LF Driver  | 300 mm (12 in)   | 380 mm (15 in)   | 380 mm (15 in)                                 |
| MF Driver  | N/A  | N/A  | 200 mm (8 in)                                  |
| HF Driver  | Pure Titanium Diaphragm<br>Compression Driver/<br>Flat-Front Bi-Radial® Horn | Pure Titanium Diaphragm<br>Compression Driver/<br>Flat-Front Bi-Radial® Horn | Pure Titanium Diaphragm<br>Horn Loaded Tweeter |
| Connectors***  | 2 x NL4MPR   | 2 x NL4MPR   | 2 x NL4MPR                                     |
| Dimensions (H x W x D)   | 700 x 460 x 390  | 900 x 520 x 430  | 900 x 520 x 430                                |
| Net Weight   | 31 kg  | 41 kg  | 45 kg  |

\* 6 dB crest factor \*\* No Power Compression Subtracted (typical 4.5 dB after 5 minutes) \*\*\* Neutrik Speakon  
JBL continually engages in research related to product development and improvement. Because of this, new materials, production methods and design refinements may be introduced into existing products without notice. For this reason, any current JBL product may differ in some respect from its published description, but will always equal or exceed the original design specifications unless otherwise stated.

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## JBL AND HARMAN INTERNATIONAL

JBL is part of the Harman International audio companies, a group with a common purpose: combining technology with a love of music to manufacture audio products that provide new levels of satisfaction, performance and value.

To promote diversity and creativity, JBL operates independently in research and development. When it comes to translating the results of these efforts into actual consumer and professional products, JBL draws on the full combined strength of the Harman Companies, which includes one of the world's most advanced manufacturing facilities. The result of this teamwork is that JBL's

renowned excellence in engineering is successfully carried through to each individual product, regardless of its application or price range.

As new audio concepts and technologies are pioneered, the partnership of JBL and Harman International guarantees that consumer and professional audio users everywhere will be able to enjoy their full benefits.



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