



JBL 250 Ti Limited Edition







Since the beginning of high fidelity reproduction, some 1,400 manufacturers have introduced nearly 38,000 different audio products* Out of that total, only a few elite products have gone from component to audio classic. Nowhere is there a more conspicuous lack of classics than in the loudspeaker category, partly because speaker design resembles high fashion in many respects. Fads come and go, form dictates function, and often logic takes a back seat to ego.

For a speaker to be considered a classic, it must be at least as desirable today as when it was introduced. That desirability should be reflected in resale value. Its design must be both forward-thinking and timeless. It should be built by people who are nothing less than artisans. Above all, it should outperform current designs-even with source materials and electronics that were nonexistent when the speaker was introduced.

"Rated absolutely first class, a reference"

-STEREOPLAY, 1989 250 Ti

The *ideal* classic speaker has still one more quality: acquirability. Benefiting from ongoing progress in manufacturing as well as technology, it should be a better speaker for the same money, rather than the same speaker for more money. It should not be inflated far beyond its original value simply because it has been around awhile.

All things considered, loudspeakers qualifying as true classics are a rare breed. That an inordinate number of them bear the name JBL narrows the field of contenders even further. All this places the JBL 250 Ti Limited Edition in a very singular class, bringing new proof to an old adage. It is always lonely at the top.

"...an outstanding combination of virtues ...the sound lives up to the speakers³ size and technology."

AUDIO, 1985, 250 Ti

Like most legends, the 250 didn't start as one. The original design brief simply called for "a loudspeaker which combines, with minimal compromise, the attributes of tonal accuracy, transient accuracy, high dynamic range, low distortion and accurate, stable imaging."

But this unassuming engineering specification raised a critical issue. When juggling the intricate mix of transducers, networks and enclosures that form the finished product, the phrase "there are always trade-offs" serves as the speaker designer's creed. No existing loudspeaker could satisfy more than a few of these critical parameters.

With over 40 years experience in loudspeaker engineering and manufacturing, and an unprecedented list of achievements in professional audio, JBL was eminently qualified to reject the limitations of present state-of-the-art in order to re-invent the speaker. The 250 class of loudspeakers is testimony to the project's success.

"The evidence all points to JBUs engineering team having succeeded admirably in achieving its design goals."

High fidelity, 1983, L250

In returning to the drawing board, the JBL engineering team took nothing for granted. JBL transducers are renowned for their unusually wide bandwidth, capable of performing far beyond the upper and lower limits of standard low, mid and high frequency drivers. A JBL speaker system with two or three such transducers will produce seamless response even with little network interaction. The 250 series speaker uses *four* of them, each operating only in the region where they exhibit virtually perfect on-axis and power response.

The first array of this type incorporating JBL transducers, the 250 driver complement is possibly the most spectrally correct, lowest distortion acoustical assembly ever conceived. Its network is equally advanced, with crossover slopes selected for minimum delay error between drivers and ideal power output summation at crossover points. Bypass capacitors make the larger network capacitors more linear. Together, the 250 network and transducer subsystems achieve most of the tonal, transient and dynamic performance characteristics originally established as the parameters of the ideal loudspeaker system.

"...take any musical performance I know of play it through this speaker at a natural level\ and get a musically accurate result."

-AUDIO, 1985, 250 Ti

Next, a physical form for the complete system was conceived, one that could potentially bring the loudspeaker even closer to perfection. The 250 enclosure is designed around its drivers, minimizing diffraction while providing correct loading. Its shape and internal construction ensures that it remains acoustically inert. The mirror-imaged pairing stabilizes the stereo image.

Under certain listening conditions, the ear is sensitive to the slightest timing errors. The 250's baffle orientation (combined with the high frequency driver mounting platform) substantially reduces timing error. With the acoustical centers of all drivers aligned, ideal phase and imaging characteristics are maintained over an unusually large listening area. Combined with the vertical, mirror imaged driver array, the end result is a stereo image that many listeners will not have heard with recorded music - regardless of their prior loudspeaker evaluation experience.

Intact low frequency information can draw the listener into the recording experience itself. The key word is intact-few systems can muster the depth and authority along with the accuracy necessary. The 250 is one of them. The primary low frequency system, tuned to the main enclosure, is essentially a built-in subwoofer. The midbass transition region is handled by a dedicated smaller low frequency transducer in its own isolated enclosure.

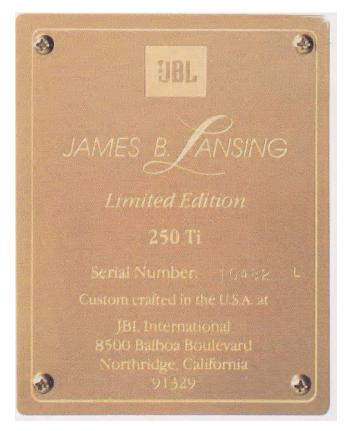
"They sound as good at background levels as when attempting to re-create the sound of an orchestral concert...there can be no doubt about the great dynamic capabilities of these speakers..."

-Stereo Review, 1985 250 Ti speaker

The midrange is also isolated in a subenclosure to protect it from interference. The most developed version of the 125 mm device proven in recording studios around the world, the 250 midrange driver provides the incisive voicing that has become a JBL trademark. Its remarkably linear frequency characteristics allow for a perfectly neutral transition down to the low frequency drivers and up to the 25 mm dome high frequency driver, which extends system response smoothly beyond the limits of human hearing.

*Source: Orion Blue Book Audio 1990 trade-in guide, page 6, published by the Orion Research Corporation.

The preceding information describes the original 250 system introduced a decade ago. It was literally and figuratively a pinnacle JBL loudspeaker design. Since then, the 250 series has served both as a working laboratory and a proving ground for new JBL engineering achievements.



Advances that demonstrate the ability to improve performance-no matter how great or slight-are duly incorporated into the latest iteration of the 250 concept. This loudspeaker is a showcase of technical triumphs. For example, the titanium technology which has since been applied throughout the JBL consumer line made its debut in the 250 series, creating the 250 Ti system. Everything in this speaker, right down to the gold-plated binding posts on the back, is the highest quality expression of applied technology.

"It seems at home with any sort of material able to maintain its clarity and composure at any volume—from the very soft to the very loud—in almost any frequency range"

HIGH FIDELITY, 1983, L250 SPEAKER

The most tangible proof of the concept's overall validity comes from two sources: the equipment reviewers who enthusiastically embrace each new 250 series development, and the audiophiles who just as enthusiastically continue to invest in them. For JBL, this is a gratifying confirmation of its long-standing development philosophy: when a product is perfect, make it better.

The Limited Edition of the 250 Ti is the finest version of the series yet produced, making it one of the most classic loudspeakers of all time. The myriad JBL technical advances incorporated into it are well known to audio enthusiasts and endorsed by audio reviews. Suffice to say the 250 Ti Limited Edition is a completely different speaker than the original 250, and a meaningful upgrade from the first acclaimed 250 Ti.

"The speaker's power-handling capabilities are superb...the 250Ti can provide excellent detail during very soft passages and does not change in sonic character as loudness increases. Few speakers at any price provide similar dynamic coherence or a similar ability to "cut loose" to fully mass-orchestral levels without strain and with a single amplifier."

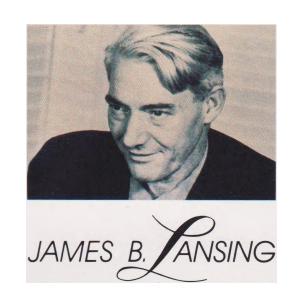
AUDIO, 1985, 250 Ti SPEAKER

But two attributes immediately draw the eye, deserving special mention. One is the high gloss lacquer piano finish. Combined with the 250 Ti Limited Edition's graceful natural sweep, this luxurious finish softens the speaker's monolithic presence to the point where it inhabits the listening environment without overwhelming it. The result is a remarkably subtle visual statement for an object of this proportion, more like a grand piano than a loudspeaker. To complement a wider range of decor, the high definition lacquer finish is available in both black and white.

The other attribute, while much smaller, is more profound. On the back of each 250 Ti Limited Edition is a brass commissioning plaque with the name James B. Lansing. It is only fitting that the name of JBL's founder-a name that stands for engineering perfection through precision-should grace this particular product.

The Jim Lansing name is reserved only for those products considered by JBL to be as close to perfection as current technology will allow. The 250 Ti Limited Edition loudspeaker is such a product. It is unquestionably an audio classic, sure to reward its purchaser with both unparalleled listening pleasure and extraordinary investment value. Moreover it is an acquirable classic, available in the Limited Edition at close to its original price through JBL's extraordinary manufacturing expertise. Reserve yours now at your authorized JBL dealer.

"The L-250 somehow manages to shelter comfortably under one roof a gutsy, upfront quality and a sensitive delicacy of reproduction seldom found together in such full flower in a single loudspeaker."





250 *Ti Limited Edition specifications*

Maximum

recommended

400 watts per channel amplifier power:

Nominal impedance: 6 ohms

Crossover

Frequencies: 400 Hz, 1.4 kHz, 5.2 kHz

Sensitivity SPL, 2.83 V @

> 1 meter: 90 dB

Low frequency

360 mm (14 in) Symmetrical driver:

> Field Geometry (SFG) transducer with 100 mm edge wound copper voice coil and aquaplas

laminate cone

Midbass driver: 200 mm (8 in) SFG transducer

> with 50 mm copper voice coil and aquaplas laminate cone

130 mm (5 in) transducer with Midrange driver:

25 mm copper voice coil and filled polypropylene cone

High frequency

driver:

25 mm (1 in) edge-driven pure titanium diaphragm 25 mm

aluminum voice coil and built-in

cooling assembly

Dividing network: Bi-wirable; switchable upper

frequency attenuation Internally wired with Monster

Cable®

Dimensions

Wiring:

height: 1321 mm (52 in) width: 572 mm (22.5 in) 362 mm (14.25 in) depth: weight: 68 kg (150 lbs)

JBL AND HARMAN INTERNATIONAL.

JBL is part of the Harman Internationa! 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.



JBL Incorporated 8500 Balboa Boulevard Northridge, California 91329 USA

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.





