



K130

K151

K145

K140

K120

K110

JBL K Series: A new generation of powerful musical instrument loudspeakers with the unmistakable sound quality and high efficiency that have become a virtual JBL trademark since the famous F Series was introduced a decade ago.

In the early sixties, performers using amplified musical instruments had very special ideas about the kind of sound they wanted — sound they couldn't get from standard loudspeakers. To satisfy their unique requirements, major guitar manufacturers and musicians — from professional to beginner — turned to JBL. The F Series provided the answer — with sound quality, efficiency and reliability only JBL could offer.

That was the sixties. Today, amplifier power is much greater, listening tastes have

grown increasingly sophisticated and the demands placed on musical instrument loudspeakers are more critical than ever before — precisely the reasons why JBL developed the K Series.

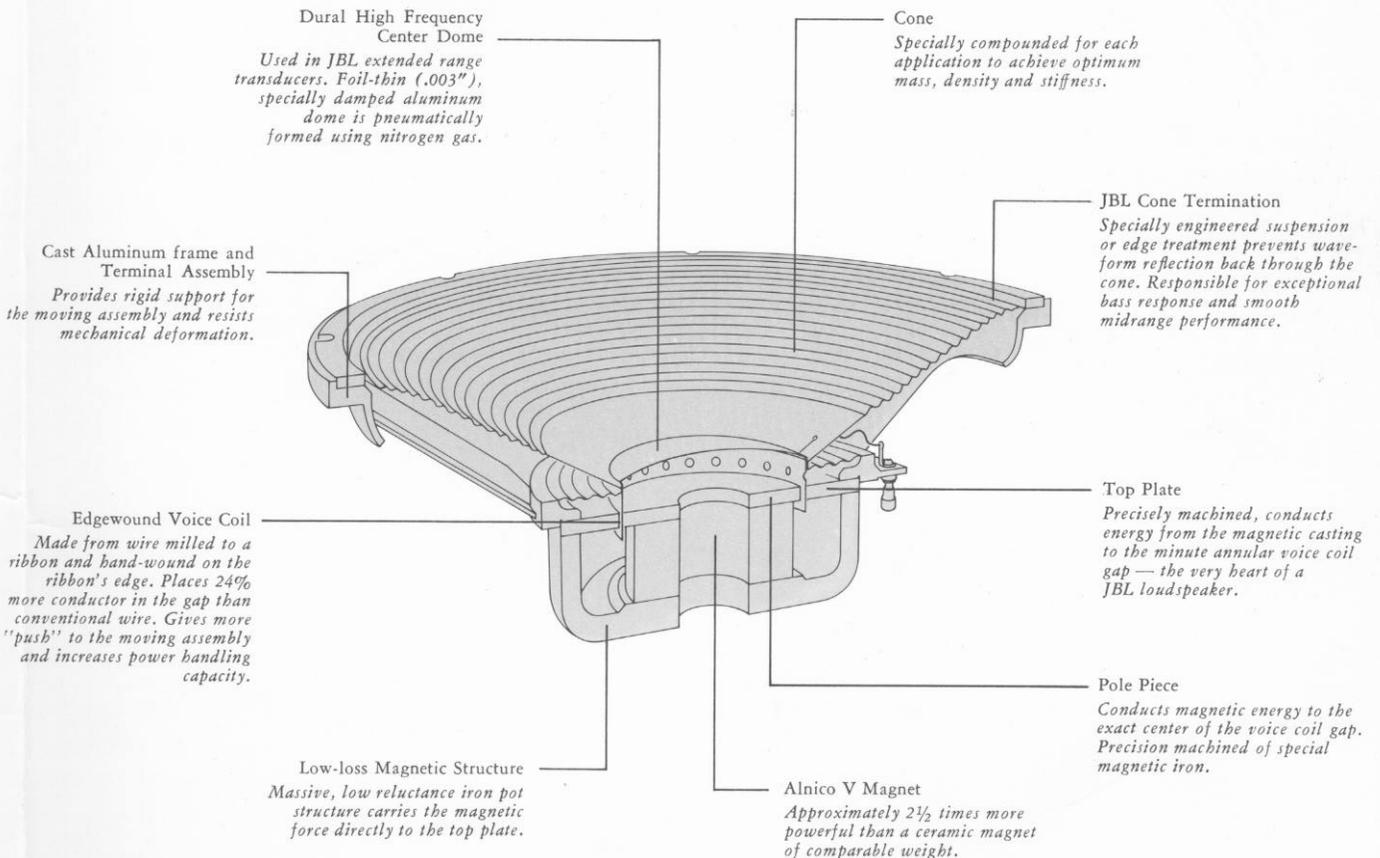
New materials have been formulated for high stress areas of the cone and voice coil which give K Series loudspeakers double the power handling capability of the previous F Series. For example, a K140 will take the full output of a 150-watt continuous sine wave amp and still sound clean at any volume level—from a whisper to an explosion.

The K Series delivers more sound per watt than other musical instrument loudspeakers. The punch in bass notes is deep and solid; midrange bite is crisp and clear; with brilliance in the highs for distinctive

tone character. JBL sound at its best, with efficiency to match.

The K Series technology

Each loudspeaker in the K Series is designed to traditional JBL quality standards. High strength Alnico V magnets in massive cast iron magnetic structures conduct energy directly to large, handwound voice coils made of ribbon wire. These precisely machined components yield maximum loudspeaker efficiency and power handling capacity. Cone surround fatigue has been virtually eliminated by the use of new compounds and materials developed by JBL. Such improvements meet the stringent demands of amplified musical instruments and provide unsurpassed durability.



K110 10-inch

Here is a loudspeaker that can take 75 watts continuous sine wave and deliver more sound output per amplifier watt than any other loudspeaker its size.

Sustain is highly predictable and overtone characteristics are brilliant, making the K110 an obvious choice where small size and big system performance are required. Considered to be JBL's crispest sounding musical instrument loudspeaker, it's right at home with lead and rhythm guitar, organ, or when stacked in a column for PA use.

The K110 may be small, but its large 3-inch diameter voice coil speaks with real musical authority.

K120 12-inch

This remarkable loudspeaker is more efficient and can handle greater power than most 15-inch models. Its full-range reproduction and 100-watt continuous sine wave rating offer performance that will satisfy the most critical musician. The K120 directly replaces conventional 12-inch musical instrument loudspeakers used in guitar amps, organs, electric pianos and similar applications.

The K120 has the same huge magnet structure and 4-inch voice coil as the 15-inch K130. That's why midrange and highs are bright, bass is smooth, and the efficiency's so outstanding in this 12-inch music maker by JBL.

K130 15-inch

The K130 is JBL's most rugged and efficient extended range musical instrument loudspeaker. Its 125-watt continuous sine wave power handling capability qualifies it as the ideal reproducer for lead and rhythm instruments. The 15-inch cone area provides considerably more output than smaller cones without the slightest sacrifice in midrange and high frequency reproduction.

K130 — the only choice when loudspeaker size is not restricted and tremendous musical sound levels are required.

K140 15-inch

This superb low frequency transducer is specially designed for bass guitarists and

organists to reproduce the rich fundamental tone character of their instruments.

Conservatively rated at 150 watts continuous sine wave, the K140 delivers pure bass notes even at thunderous levels with efficiency that's unmatched by any other 15-inch bass loudspeaker. The K140 is 15-1/2 pounds of low frequency dynamite.

K145 Bass Instrument Loudspeaker

A Success Story. The objective: To create brand new sound in a 15-inch bass instrument loudspeaker — sharply defined, crisp sound that projects a bigger bass punch than ever heard before from other loudspeakers its size. Plus the same high efficiency and power handling that have made JBL the overwhelming choice of professionals for over 30 years.

The K145's special cone is powered by the most massive magnetic structure JBL has ever built. 20 pounds worth, and in the JBL tradition, all critical areas are precisely machined for optimum performance. It contains a large, costly Alnico V magnet (250% stronger per pound than conventionally used ceramic types) that directs tremendous energy to the magnetic gap through a huge cast iron pot structure. Within the magnetic gap lies a 4-inch diameter voice coil of copper wire, milled to a fine ribbon then tightly wound by hand on its narrow edge. Compared to small, machine made coils of round wire which are typically used in other speakers, this process increases efficiency, expands dynamic range and provides outstanding definition — the kind of extra performance a musician expects from JBL.

K151 Bass Instrument Loudspeaker

JBL's new K151 is a powerhouse 18-inch loudspeaker made especially for electric bass, and designed for unsurpassed performance in horn-loaded or reflex enclosures.

K151 has it all. 20 pounds of precision machined Alnico V with high grade iron and steel for a super strong magnetic structure. A big 4-inch voice coil of special ribbon wire which places 24% more wire in the magnetic gap than standard coils of round wire. Finally, a cone that's an optimum combination of stiffness, density and

mass the result is massive amounts of force that give K151 outstanding efficiency, unmatched power handling capacity and sound — from C sharp clear down to low E. Perfectly. Powerfully.

Power Handling Capacity

Since a number of manufacturers continue to use the less stringent "continuous program power" rating, we have included these figures for your reference.

The continuous program power method of rating is acceptable for loudspeakers used at home, because the dynamic range of music they reproduce has been greatly compressed in the recording process and playback levels are relatively moderate. As a result, demands placed on home entertainment loudspeakers are far less critical than those used with amplified musical instruments.

In contrast, musical instrument loudspeakers receive their signal directly from a performer's instrument — with all of its wide dynamic range and explosive transients. Amplifier power and volume level are often very high — especially during live performances.

Because these conditions are so severe, we prefer the continuous sine wave method for rating power handling capacity. This laboratory standard test is far more demanding than actual performance situations, and provides a truly credible measure of a loudspeaker's capability.

Loudspeakers can be most easily overdriven where their measured impedance is at its minimum point (impedance actually varies from low to high frequencies in all loudspeakers). For this reason, we require the K Series loudspeakers to withstand its full rated power input at all frequencies within one-half an octave on each side of the minimum impedance region — and to sustain this performance continuously for one hour without damage.

While other methods can be used to achieve even greater power rating figures, such as instantaneous or peak, JBL's tests and power ratings provide a musician with specifications that are realistic in relation to his performance requirements.

Specifications	K110	K120	K130	K140	K145	K151
Primary Application	Lead or rhythm guitar, organ, piano, voice, column	Lead or rhythm guitar, electric piano, organ, vocals	Lead or rhythm guitar, electric piano, organ, vocals	Electric bass, organ	Electric bass, organ	Electric bass, organ
Nominal Diameter	250 mm 10 in	300 mm 12 in	380 mm 15 in	380 mm 15 in	380 mm 15 in	460 mm 18 in
Nominal Impedance ¹	8 Ω	8 Ω	8 Ω	8 Ω	8 Ω	8 Ω
Power Capacity						
Continuous program	150 W	200 W	250 W	300 W	300 W	300 W
Continuous sine wave ²	75 W	100 W	125 W	150 W	150 W	150 W
Sensitivity ³	98 db SPL	101 db SPL	103 db SPL	98 db SPL	98 db SPL	99 db SPL
Frequency Range	60-8000 Hz	50-6000 Hz	50-6000 Hz	40-2500 Hz	40-2500 Hz	35-2000 Hz
Voice Coil Diameter	76 mm 3 in	102 mm 4 in	102 mm 4 in	102 mm 4 in	102 mm 4 in	102 mm 4 in
Voice Coil Material	Aluminum	Aluminum	Aluminum	Copper	Copper	Copper
Magnetic Assembly Weight	3.0 kg 6-1/2 lb	5.4 kg 12 lb	5.4 kg 12 lb	5.4 kg 12 lb	9.0 kg 19-3/4 lb	9.0 kg 19-3/4 lb
Flux Density	1.02 tesla (10,200 gauss)	1.20 tesla (12,000 gauss)	1.20 tesla (12,000 gauss)	1.20 tesla (12,000 gauss)	.95 tesla (9,500 gauss)	1.20 tesla (12,000 gauss)
Baffle Cutout Diameter						
Front mount	228 mm 9 in	281 mm 11-1/16 in	355 mm 13-31/32 in	355 mm 13-31/32 in	355 mm 13-31/32 in	427 mm 16-13/16 in
Rear mount	222 mm 8-3/4 in	281 mm 11-1/16 in	343 mm 13-1/2 in	343 mm 13-1/2 in	343 mm 13-1/2 in	422 mm 16-5/8 in
Depth	111 mm 4-3/8 in	121 mm 4-3/4 in	143 mm 5-5/8 in	143 mm 5-5/8 in	168 mm 6-5/8 in	194 mm 7-5/8 in
Net Weight	3.7 kg 8-1/4 lb	6.4 kg 14 lb	7.0 kg 15-1/2 lb	7.0 kg 15-1/2 lb	11.7 kg 25-3/4 lb	11.9 kg 26-1/4 lb

¹The nominal impedance specified is the standard configuration. The K110, K120, K130, K140, and K145 are also available with an impedance of 16 ohms.

²The continuous sine wave rating of power is the most stringent method currently used in the audio industry. It should be noted that many manufacturers use the term "watts rms" as a direct equivalent to the more meaningful "watts continuous sine wave."

³Swept from 500 to 2500 Hz, within 1 dB, measured at 1 m (3.3 ft) with a 1-W input.

K
Series