

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 nearly 30 years.

During months of experimentation, design after design was thoroughly evaluated in field tests conducted by professional musicians and in laboratory tests by JBL engineers. Finally, one unique prototype delivered precisely the sound and performance we were after. We named it K145 Bass Instrument Loudspeaker, and it's a bit unlike any electric bass speaker you've ever seen or heard. Deliberately. The K145 looks different because it is different. And its appearance has much to do with its sound. For example, observe K145's exceptionally massive die-cast frame assembly. It's that big because it suspends a deep, ultra-stiff cone, and this cone plays an important role in K145's performance; important because it remains under control even at full rated power-150 Watts RMS.

K145's special cone is powered by the most massive magnetic structure JBL has ever built. Twenty 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.

Playing a K145 loudly reveals thunderous bass that's unmistakably crisp and defined, capturing a bass guitar's deepest fundamentals and rich harmonics. Yet sound quality is pure at virtually any level. Such outstanding reproduction has been achieved through an exceptional skill in blending loudspeaker art and technology—a skill that is uniquely JBL's.

Introduce yourself to K145; the unique loudspeaker with big, beautiful bass.

Power Handling Capacity

The K145 is rated at 150 Watts RMS. 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 RMS 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 loud-speaker'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 K145 to withstand its full rated power input (150 Watts RMS) at all frequencies within one-half an octave on each side of its minimum impedance region—and sustain this performance continuously for one hour without damage.

While other methods can be used to achieve even greater RMS power rating figures, such as testing for shorter lengths of time and/or testing at other than the loudspeaker's minimum impedance region, our tests and power ratings provide you with specifications that are very realistic—by commonly used standards, conservative.

Warranty

The K145 has a five-year warranty which is not limited to the original purchaser and covers any original manufacturing defects in materials or workmanship. JBL will, at its option, repair or replace any K145 if factory inspection reveals a manufacturing defect, without time limitation.

Specifications	
Frame Diameter	15-13/16 in (40.2 cm
Voice Coil Diameter	4 in (10.2 cm)
Voice Coil Material	Edgewound Copper Ribbon
Magnetic Assembly Weight	20 lbs (9.1 kg)
Magnet Material	Alnico V
Sensitivity	
1 Milliwatt Input	44 dB SPL @ 30 feet
1 Watt Input	94 dB SPL @ 3 feet
Power Capacity	
Continuous RMS	150 Watts
Continuous Program	300 Watts
Free Air Resonance	45 Hz
Frequency Range	40-2500 Hz
Flux Density	9,500 gauss
Impedance*	4, 8 or 16 ohms
Primary Application	Electric bass, organ
Depth	6-5/16 in (16 cm)
Mounting Flange Depth	1-1/8 in (2.9 cm)
Bolt Circle Diameter	14-9/16 in (36.9 cm)
Baffle Hole Diameter	
Front Mount	14 in (35 cm)
Rear Mount	13-1/2 in (34.3 cm)
Net Weight	26.25 lbs (11.9 kg)
Shipping Weight	29.5 lbs (13.4 kg)

^{* 8} ohms standard, 4 or 16 ohms optional.