

ARENA X

1", 3-1/2" and 6-1/2" (165mm) 3-way active component speaker system



The Ultimate Music Experience. Dare to Listen!

The JBL Arena X is the flagship automotive loudspeaker from our Arena Series. It includes a 25mm (1-inch) beryllium tweeter driven by a powerful neodymium motor structure for the ultimate in lightweight performance. The powerful all-new tweeter and 6th-generation ceramic-coated, cast-aluminum Acoustic Lens waveguide seamlessly integrate with the directivity of the companion midrange drivers resulting in greater efficiency, improved dynamic range, reduced distortion, and increased power handling compared to aluminum or titanium tweeters. Beryllium – Element 4 on the Periodic Table – is a rare earth metal that is renowned for its remarkable physical properties that make it the ideal material for a high-frequency transducer. Compared to aluminum and titanium tweeter diaphragms, Beryllium offers 4.5 times the stiffness and three times more damping, and does so at only half of the weight. Beryllium tweeters are the centerpiece of the ARENA automotive loudspeaker series. The 3.5-inch (90mm) midrange and 6.5-inch (165mm) aluminum basket woofers utilize woven carbon fiber cones for improved performance. The stiff lightweight cones combine with optimized motor magnetics to deliver memorable midand low-frequency performance and specially formulated acoustic adhesive chosen to provide superior strength and sound quality.

Features

- ► 1-inch Edge-Driven Pure Beryllium Dome Tweeter
- Proprietary Acoustic Lens Waveguide Geometry Tweeter
- ► Carbon Fiber Composite Cone Midrange and Woofers
- ► Nomex Spider Midrange and Woofers
- ► Seamless Perfect Active Speaker System
- ► Neodymium Magnet Motor
- ► Die-Cast Aluminum Basket
- ➤ Bi-Amp Capable Precision Outboard Crossover network
- ► Magnetic Absorption Design



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Features and Benefits

1-inch Edge-Driven Pure Beryllium Dome Tweeter

Beryllium offers 4.5 times the stiffness and three times more damping than more commonly used Aluminum and Titanium diaphragms, delivering extended high-frequency performance out to 40kHz. This benefits the listener by virtually eliminating all harshness in the audio band, delivering a smooth, precise and detailed performance, even at high output levels.

Proprietary Acoustic Lens Waveguide Geometry Tweeter

Ceramic-coated, cast-aluminum Acoustic Lens waveguide engineered to seamlessly integrate with the directivity of the companion midrange driver.

Carbon Fiber Composite Cone Midrange and Woofers

The ultra-rigid carbon fiber dustcap and cone body minimize unwanted cone flexing, ensuring smooth frequency response.

Nomex Spider Midrange and Woofers

Spider is specifically designed to ensure linear motion in both forward and rearward directions. This minimizes distortion caused by the speaker's suspension.

Seamless Perfect Active Speaker System

Seamless transducer integration design for use with high-quality DSP to eliminate technical compromises, allowing for the use of delay, crossover parameters, and precise equalization to adjust for speaker placement, cabin acoustics and target response.

Neodymium Magnet Motor

Provides high flux density and allows more room for larger steel motor components, providing critical heatsink mass for the voice coil.

Die-Cast Aluminum Basket

Rigid support for the motor structure allows for tighter tolerances, yielding reduced distortion and acoustic anomalies.

Bi-Amp Capable Precision Outboard Crossover Network

High tolerance components are used to ensure purity and low distortion with a 12dB per octave alignment on the mid/woofer and 24dB per octave alignment on the tweeter. It is also set up for bi-amping if so desired and a three position tweeter output is also included to optimize performance based on location and vehicle materials.

Magnetic Absorption Design

Strong magnetic field adsorption technology take you to the new case era. From now on, grille installing became a pleasure. It makes your loudspeakers stand out among crowd. Magnetic absorption technology makes installation a breeze.

What's in the box:

- 1 pair woofers
- 1 pair midrange

- pair midrange decoration ring
 pair tweeter plastic ring 1 fixture under tweeter
- 1 pair metal plate bracket
- 1 pair woofer gaskets
- 1 pair of midrange gaskets

User Manual

Technical specifications:

- ► 6-1/2" (165mm) 3-way active car component speaker system
- 6th-generation ceramic-coated acoustic
- ➤ 3.5" Carbon fiber cone midrange with
- cast frames

 ▶ 6.5" Carbon fiber cone woofer with cast frames
 Frequency Response (-6dB): 20Hz – 40kHz
 Power Handling: 100Wrms, 200W peak

- Nominal Impedance: 4 ohms
- Sensitivity: 90dB (2.83V @1M)
- ► Woofer mounting depth: 2.83 in./72mm
- Midrange mounting depth: 1.47 in./37.5mm
- Tweeter flush mounting depth: 1.52 in./38.5mm

