



AMK Commercial Series  
**XCX 12A90**  
 12" Coaxial Loudspeaker

The AMK XCX12A90 is a very high quality professional coaxial system for high Sound Reinforcement applications. A cast frame basket and a large titanium dome compression driver firing through the pole-piece make this one of the finest 12" co-axial speakers available in the commercial sound industry. An LCR crossover is supplied mounted to the frame of the speaker. Many find the speaker to have a "smooth" high frequency sound due to our innovative solid wood high frequency horn. The material neutralizes any resonances at high frequencies.

**Features**

Non-resonant solid wood high frequency wave-guide with 64-degree conical pattern

- ♦ Dual spider
- ♦ Die-cast basket
- ♦ Kapton voice-coil formers
- ♦ Heavy duty binding posts
- ♦ Edge-wound voice-coils

**Related Accessories:**

Transformers: 70V or 25V Line of Transformers  
Recommended Backbox: PR2243-12 Backbox (3 cubic foot)  
Grille: 12MSG

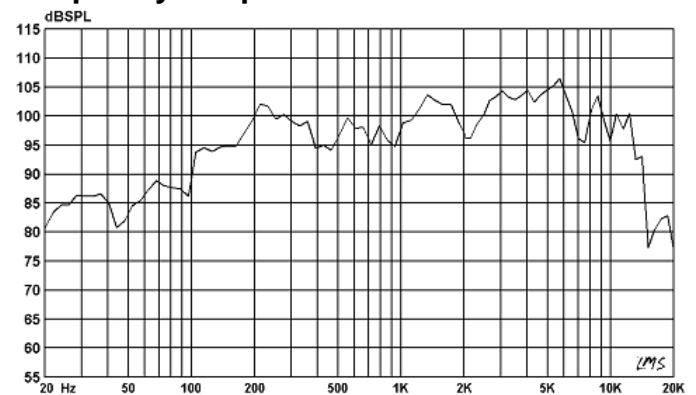
*Cabinet enclosure information is available on our website. The speaker is also offered without crossover as model CX12A90.*



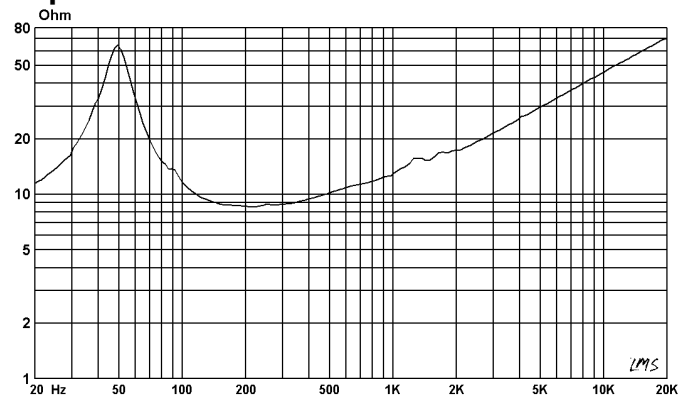
**Specifications**

Frequency Response	55 Hz - 20kHz
Power Handling	200 watts
Impedance	8 ohms
Sound Pressure level (1w/1m)	102 dB averaged
Voice-coil diameter	2.0
Average Beam width @ 2 kHz	64°
Fo	50 Hz
Qts	0.438
Vas	3.88 ft <sup>3</sup>
Vd	139 ccm
Efficiency Bandwidth Product	107 Hz
Le (woofer)	.7 mH
BL product	15 N/A
X max	2.55 mm
Woofer Cone	Paper w/ cloth roll surround
Woofer Voice-coil	2.58" Ribbon Wire on Kapton
Woofer Magnet Weight	50 oz
Compression Driver Diaphragm	Pure Titanium
Compression Driver Voice-coil	2.0" Ribbon wire on Kapton
Compression Driver Magnet Weight	25 oz
Compression Driver Horn	Solid lathed poplar wood
Crossover	2.5 kHz
Net Weight	15 lbs

**Frequency Response**

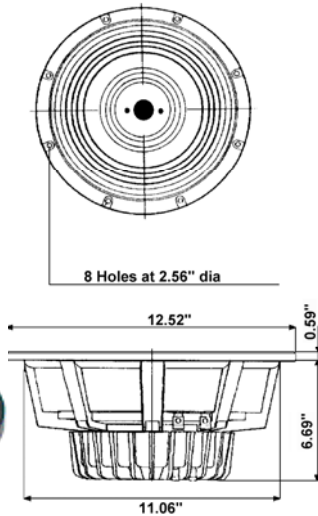
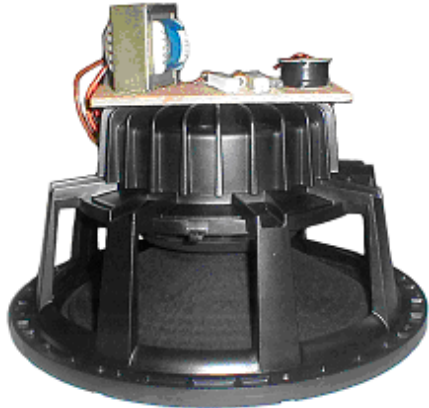


**Impedance Curve**





Speaker w/ Crossover



The depth of the speaker varies depending on the size of a transformer

### Architect's and Engineer's Specifications

The speaker shall be AMK 12" Coaxial loudspeaker Model XCX12A90 or loudspeaker / transformer combination Model XCX12A90T \_\_\_\_\_ (utilizing AMK line-matching transformer Model T \_\_\_\_\_). The low frequency reproducer shall be a full 12" (304mm) in diameter with a high frequency compression driver that "shoots" through the LF pole piece. The power handling of the unit shall be 200W

The woofer shall have a 50 oz. Barium Ferrite magnet and compression driver shall have a 25oz Barium Ferrite magnet. The high frequency horn unit shall be made of solid lathed poplar wood. The voice coil of the woofer shall be of copper ribbon wire on a 2.58" (65.5mm) Kapton former with a treated paper cone suspended with a pleated cloth surround. The high frequency compression driver unit shall be of ribbon wire on Kapton former with a 2"(50.8mm) pure titanium diaphragm.

The two reproducer sections shall be coupled through a special phase and impedance compensated L/C/R crossover network specially designed by AMK. The crossover frequency shall be at 2.5 kHz. The unit's frequency response range shall be 55 Hz to 20 kHz (+/- 5dB). The sensitivity shall be 102dB at 1 watt / 1 meter. Voice coil impedance shall be 8 ohms. Transformer primary voltage shall be \_\_\_\_\_ (25V, 70.7V, 70/25) with a frequency response range of \_\_\_\_\_ and power taps at \_\_\_\_\_ watts. Insertion loss shall not exceed \_\_\_\_\_ dB.

The maximum depth of the loudspeaker shall not exceed 7.3" (185mm). The unit's total weight shall not exceed 15 lbs (6.8 kg).

The loudspeaker shall be AMK Innovations model XCX12A90.

**Conforms to EIA Standards:**  
RS-276-A, RS-278-B, RS-426-A

### Polar Responses

