



C12BT60

12" Full Range Coaxial Speaker System



C12BT60



C12BT60
(Back)

Specifications

| | |
|--|----------------------|
| Frequency Response | 40Hz – 20kHz (±10dB) |
| Frequency Response | 68Hz – 15kHz (±3dB) |
| *Power Handling | 100 Watts |
| **Sensitivity 1W/1M | 95dB |
| Max. SPL @ 1M (Transformer Limited @ 60Watts) | 113dB |
| Nominal Impedance | 8Ω |
| Crossover Frequency | 2750Hz |
| ***Dispersion Angle | 90° |

LF Transducer

| | |
|-------------------------------|------------------------------|
| Basket Material | Cast Aluminum |
| Cone Material | Treated Paper |
| Surround Material & Dampening | Treated Accordion Cloth Edge |
| Voice Coil Diameter | 1.5" (38mm) |
| Magnet Weight | 30oz. (.85kg) |

HF Transducer

| | |
|-------------------------------|-----------------------------|
| Diaphragm Material | Treated Laminated Silk |
| Voice Coil Diameter | 1" (25mm) |
| Voice Coil Former Material | Aluminum |
| Voice Coil Material | Copper |
| Magnet Weight | 10oz. (283g) |
| Top Plate Thickness | 0.125" (3mm) |
| Transformer | |
| Frequency Response | 75Hz – 15kHz (±2dB) |
| Primary Taps @ 70.7V | 7.5, 15, 30, 60 Watts |
| Maximum Insertion Loss | 1dB |
| Diameter | 12.875" (327mm) |
| Depth | 4.875" (124mm) |
| Mounting Dimensions | 11.625" (295mm) Bolt Circle |
| Net Weight (Less Transformer) | 10.5 lbs (4.76kg) |
| Warranty | 5 Years |

Recommended Enclosure For Maximum Low Frequency Performance**** Atlas Sound Q4412 (2 Ft³, .054m³)

* Rated power based on EIA specification -

** Averaged from 500Hz to 2.5kHz

*** Dispersion angle = 6dB down point at 2kHz

**** When used in full space anechoic with the Atlas Sound Q4412 two ft³ enclosure the C12BT60 operates within a frequency response range of 68Hz - 20kHz (±3dB). Sensitivity is 95dB (1W/1M). Dispersion angle is 90° @ 2kHz.

Features

- Professional Quality Sound Reproduction at a Competitive Price
- Includes Factory-Installed Line-Matching Transformer
- Ideal for Multi-Purpose Commercial, Industrial and Institutional Use
- Mounts a Wide Selection of Atlas Sound Baffles
- Coaxial Loudspeaker With 12" Diameter Low Frequency and 1" Diameter High Frequency Reproducer

Applications

Enhance audio quality and listener appreciation of engineered sound systems with the superior sound reproduction and power handling capacity of C12BT60. Professional quality 12" coaxial loudspeaker with factory installed 60 Watts line-matching transformer is ideal for application in restaurants, night clubs, lounges, theaters, airports, waiting rooms, shopping malls, houses of worship or any commercial, industrial and institutional application, with high ceilings

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General Description

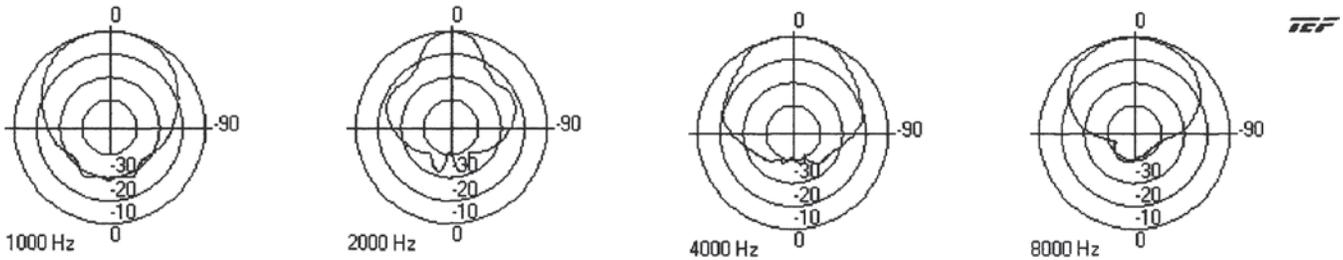
C12BT60 is a professional quality coaxial loudspeaker for use where full range music and voice reproduction are desired. Model C12BT60 combines a 12" diameter low frequency reproducer and a 1" diameter high frequency, post-mounted reproducer. The unit features a curve linear, treated paper cone for lower harmonic distortion and a built-in crossover network for determining proper frequency selection between the two reproducers. Both the low frequency reproducer and the tweeter feature permanently aligned voice coils (1.5" and 1" diameter, respectively) to assure distortion free performance.

The copper voice coils have an anodized aluminum former. The competitively priced unit assures smooth frequency response in a high power handling mode. For best results, enclosures with a volume of 2 ft³. or greater (including Atlas Sound Models Q4412 or Q4612) are recommended. Additional Q Series enclosure models with a volume up to 6 ft³. will satisfy requirements with different low frequency emphasis. The loudspeaker will also provide outstanding performance when front or rear mounted in vented or sealed enclosures. A factory installed 60 Watts line transformer is included with the package, however, the transformer can be easily bypassed for 8Ω applications. Amplifier output wiring connections to the loudspeaker are "pig tail" leads loudspeaker weight is 10.5 lbs (4.76kg).

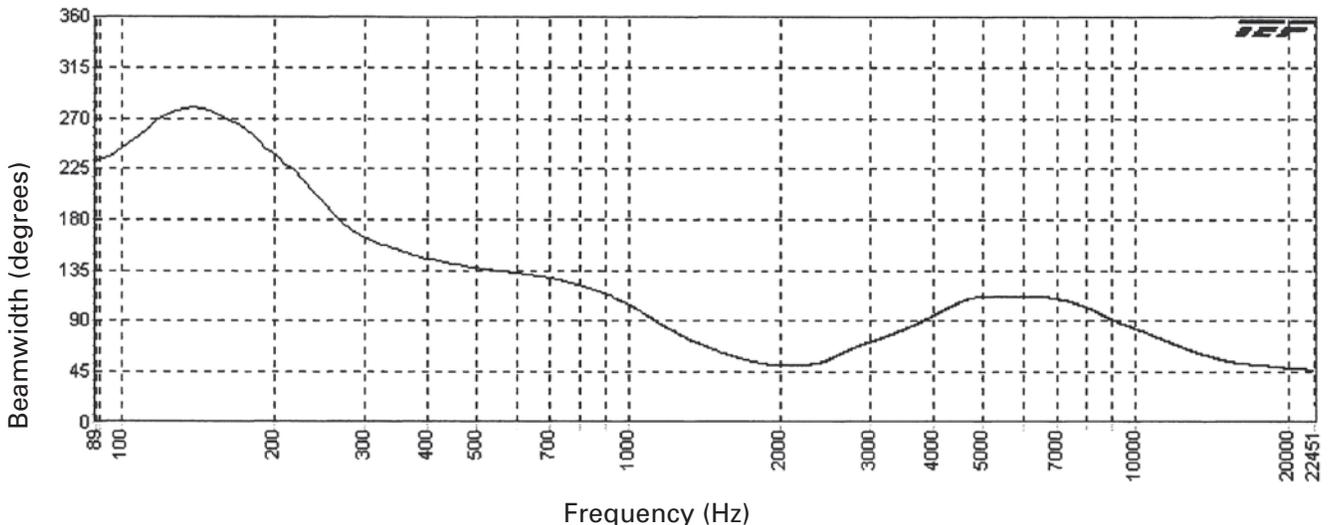
Architect and Engineer Specifications

Frequency response range shall be 68Hz – 15kHz (±3dB) in full space anechoic environment when mounted in a 2 cu. ft. enclosure. Sensitivity shall be 95dB at 1 watt, 1 meter. Voice coil impedance shall be 8Ω (nominal). Low frequency voice coil diameter shall be 1½" (38mm). High frequency voice coil diameter shall be 1" (25mm). The maximum depth of the loudspeaker shall not exceed 4.1875" (106mm). Basket shall be made of cast metal. Loudspeaker shall be capable of front and rear mounting in sealed or vented enclosures and weigh 10.5 lbs (4.76kg). The low frequency reproducer cone shall be a full 12" (305mm) in diameter and the high frequency reproducer diaphragm shall be 1" (25mm) in diameter. The woofer shall have a 30oz. (.85kg) ceramic magnet. The tweeter shall have a 10oz. (.283kg) ceramic magnet. The two reproducer sections shall be coupled through a built-in crossover network. The crossover frequency shall be at 2750Hz. Conical dispersion shall be 90° at 2kHz. Unit shall include factory-installed line transformer. Transformer primary voltage shall be 70.7V or 100V with a frequency response range of 33Hz – 21kHz (±2dB) and power taps at 7.5, 15, 30, and 60 Watts. Insertion loss shall not exceed 1dB.

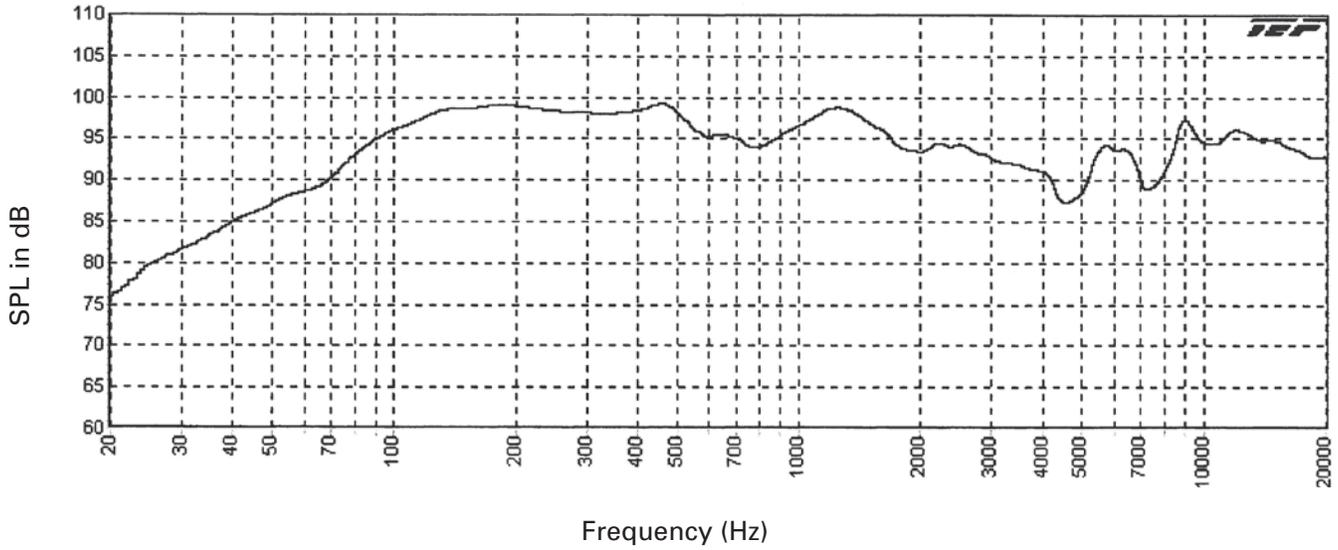
C12BT60 Polars (Normalized to Zero on Axis) (-6dB)



C12BT60 Directivity vs. Frequency



C12BT60 Frequency Response



C12BT60 Harmonic Distortion

