



# 8CXT60

## 8" Compression Coaxial Loudspeaker



8CXT60

### Features

- 1" Exit Compression High Frequency Driver Coupled to a Specially Designed Conical Wave-Guide Horn Provides Exceptional Output & Accurate High Frequency Reproduction
- High Efficiency Cone Woofer is Optimally Matched with a Specially Designed Crossover to Insure Even Transition Between Components
- 90° Conical Dispersion (@ 2000Hz)
- Includes Factory Installed, 60 Watts, 70.7V/100V Transformer
- Perfectly Suited for Use With Atlas Sound "Q" Series Enclosures

### Specifications

Frequency Response Measured in Q408	48Hz – 18kHz (±10dB)
Frequency Response Measured in Q408	68Hz – 15kHz (±3dB)
Power Handling*	150 Watts
Sensitivity 1W/1M**	92dB
Max. SPL @ 1M (Transformer Limited @ 60W)	110dB
Crossover Frequency	2000Hz
Dispersion Angle***	90°

### Low Frequency Transducer

Basket Material	Cast Aluminum
Cone Material	Polypropylene
Surround & Dampening	Thermal Plastic Ealstomer
Voice Coil Diameter	2" (48mm)
Magnet Weight	40oz. (1.14Kg)

### High Frequency Compression Driver

Diaphragm Material	Titanium
Voice Coil Diameter	1" (25mm)
Voice Coil Former Material	Aluminum
Voice Coil Material	Copper
Throat Diameter	1" (25mm)
Magnet Weight	20oz. (567g)
Top Plate Thickness	0.218" (5.56mm)

### Transformer

Frequency Response	75Hz – 15kHz (±2dB)
Primary Taps @ 70.7V	7.5, 15, 30, & 60 Watts
Maximum Insertion Loss	1dB
Diameter	8.25" (310mm)
Depth	8" (203mm)
Mounting Dimensions	7.75" (295mm) Bolt Circle
Net Weight (Less Transformer)	11 lbs (4.99kg)
Warranty	5 Years
Suggested enclosure for Max Low Frequency Performance	Atlas Sound Q418 (1½ Ft³, .042m³)

\* Rated power based on EIA specification - The 8CXT60 is designed to comply with the power test described in EIA Standard RS-426A. The EIA test spectrum is applied for eight hours. This procedure provides a rigorous test of both thermal and mechanical failure modes.

\*\* Averaged from 500Hz to 2.5kHz

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

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## Applications

The 8CXT60 is optimized for high-ceiling applications such as arenas, convention centers, gymnasiums and auditoriums. The extreme high efficiency and higher "Q" of the 8CXT60, with its powerful 8" speaker and 1" exit compression driver, provides the increased available SPL often required in these high ceiling applications. In 70.7V/100V systems, this high efficiency can also result in lower tap settings, which can conserve amplifier power.

## General Description

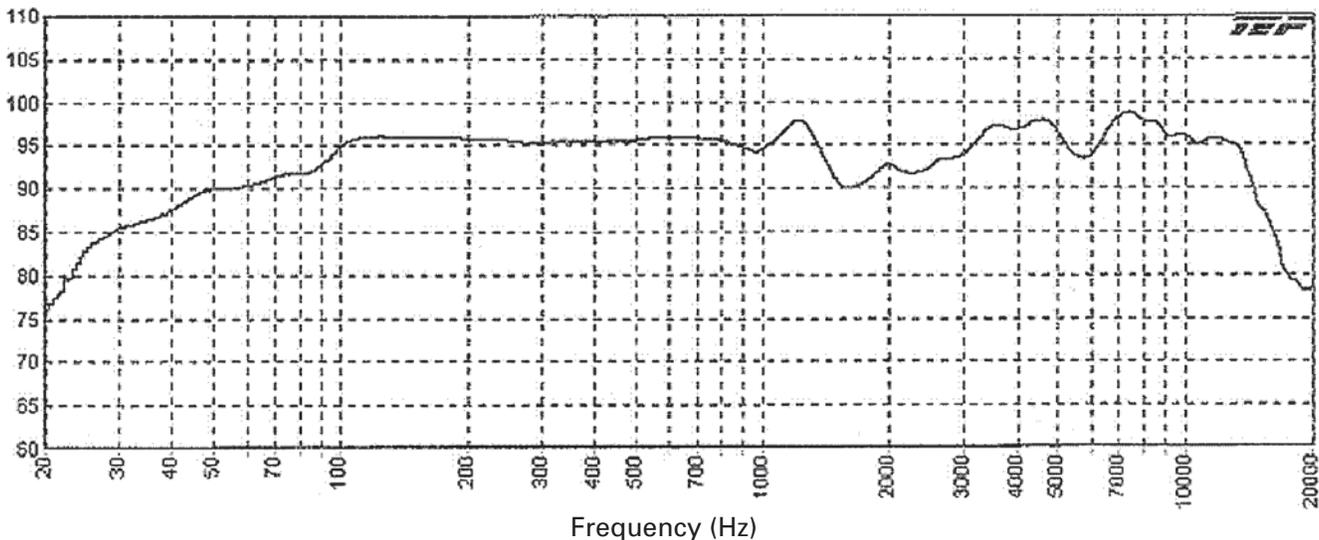
Model 8CXT60 is a 150 Watt loudspeaker that combines an 8" diameter, low frequency transducer and a 1" exit, true compression driver. The unit features a curvilinear, polypropylene cone for lower harmonic distortion, and a built-in crossover network for proper frequency transition between the two reproducers. Both the low frequency reproducer and the High Frequency driver feature permanently aligned voice coils to assure distortion free performance. The copper voice coils have aluminum formers. Model 8CXT60 operates within a frequency response range of 48Hz – 18kHz ( $\pm 10$ dB) with a sensitivity of 92dB and a dispersion angle of 90°. The loudspeaker meets functional and aesthetic application requirements by mounting to a wide variety of round and square Atlas Sound baffles and enclosures. For applications requiring extended low-end performance, Atlas Sound offers a selection of 1 and 1.5 ft<sup>3</sup>. enclosures (Q408, QS408, Q418, and Q428-SA), allowing for a complete high output solution. (see Q Series Data sheet). In general, loudspeaker performance is significantly enhanced by larger back box size.

Model 8CXT60 includes a factory installed, high efficiency, 60 Watts, 70.7V/100V step down line transformer. Power taps are provided at 7.5, 15, 30, and 60 Watts (@70.7V).

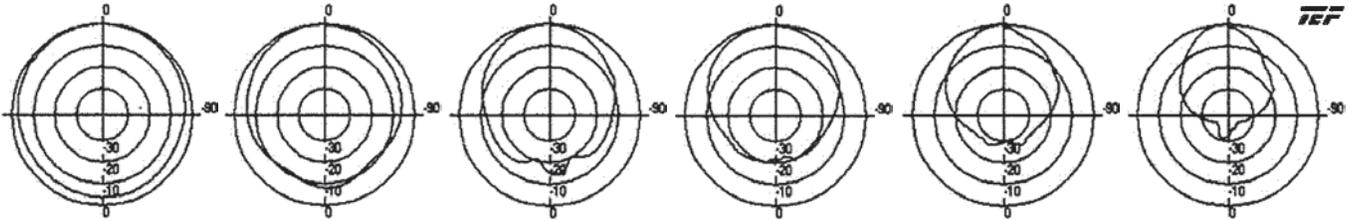
## Architect and Engineer Specifications

Frequency response range shall be 60Hz – 15kHz, ( $\pm 3$ dB). Sensitivity shall be 92dB at 1 watt, 1 meter. Voice coil impedance shall be 8 $\Omega$  (nominal). Low frequency voice coil diameter shall be 2" (48mm). The maximum depth of the loudspeaker shall not exceed 8" (203mm). The low frequency reproducer cone shall be a full 8" (203mm) in diameter and the high frequency reproducer diaphragm shall be 2.5" (65mm) in diameter. The woofer shall have a 40oz. (1.14Kg) ceramic magnet. The tweeter shall have a 20oz. (.57Kg) ceramic magnet. The two reproducer sections shall be coupled through a built-in crossover network. The crossover frequency shall be at 2000Hz. Conical dispersion shall be 90° at 2000Hz. The unit shall include a factory installed transformer. Transformer primary voltage shall be 70.7V or 100V with a frequency response range of 75Hz – 15kHz ( $\pm 2$ dB) and power taps at 7.5, 15, 30, and 60 Watts. Insertion loss shall not exceed 1dB. Unit shall be Atlas Sound 8" diameter loudspeaker Model 8CXT60.

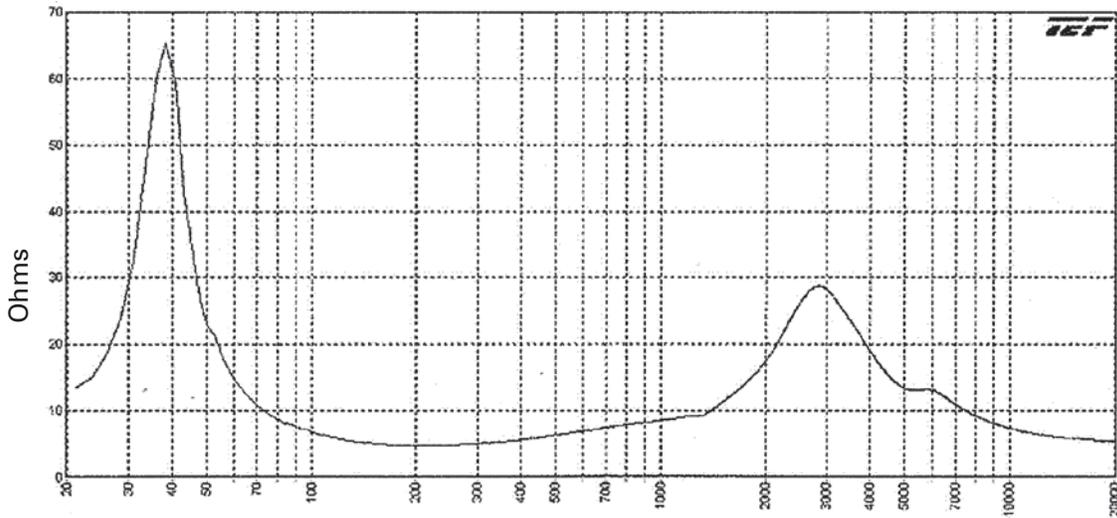
## 8CXT60 Frequency Response



## 8CXT60 Polars (Normalized to Zero on Axis) (-6dB)



## 8CXT60 Impedance



Frequency (Hz) Octave Smoothing = 30.0%

## 8CXT60 Harmonic Distortion

