

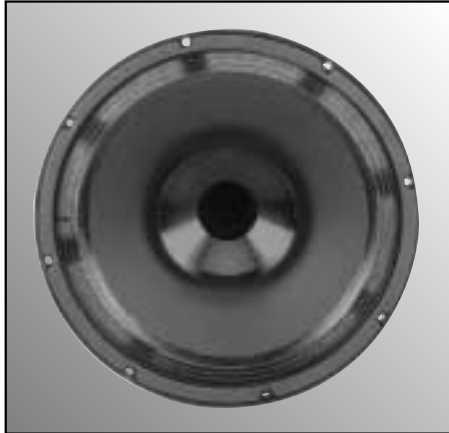


TRUE COMPRESSION COAXIAL LOUDSPEAKER

AVAILABLE WITH TRANSFORMER

12CX
12CXT60

ONE



Full Range Compression Driver Coaxial Speaker System	
Frequency Response ($\pm 10\text{dB}$) Measured in Q4812	45 Hz to 18 kHz
Frequency Response ($\pm 3\text{dB}$) Measured in Q4812	65 Hz to 15 kHz
Power Handling*	250 Watts
Sensitivity 1W/1M**	99dB
Max. SPL @ 1M (Transformer Limited @ 60W)	117dB
Max. SPL @ 1M (8 Ohm @ 250 Watts)	123dB
Nominal Impedance	8Ohm
Crossover Frequency	1800 kHz
Dispersion Angle***	90 Degrees
LF TRANSDUCER	
Basket Material	Cast Aluminum
Cone Material	Treated Paper
Surround Material & Dampening	Cloth Edge
Voice Coil Diameter	2.5" (63.5mm)
Magnet Weight	70 oz.
HF COMPRESSION DRIVER	
Diaphragm Material	Titanium
Voice Coil Diameter	2" (51mm)
Voice Coil Former Material	Kapton®
Voice Coil Material	Copper
Throat Diameter	1" (25mm)
Magnet Weight	40 oz. (1244g)
Top Plate Thickness	0.218" (5.56mm)
Transformer (12CXT60 Only)	Frequency Response: 33 Hz to 21 kHz ($\pm 2\text{dB}$)
	Primary Taps @ 70.7V: 60,30,15,7.5
	Maximum Insertion Loss 1dB
Diameter & Depth	12.875" (310mm) Dia. & 8" (203mm) Deep
Mounting Dimensions	11.625" (295mm) Bolt Circle
Net Weight (Less Transformer)	21 lbs (4479g)
Warranty	5 Years
Recommended Enclosure For Maximum Low Frequency Performance****	Atlas Sound Q4812 (6 Ft ³ , .169m ³)

* Rated power based on EIA specification - The 12CX 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 500 Hz to 2.5 kHz

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

**** Although low frequency performance is maximized when Atlas Sound model Q4812 enclosure is utilized, Atlas Sound models 12CX & 12CXT60 will also work quite well with Atlas Sound Q series enclosure models: Q4612, Q4712 & Q4812. Model Q4412 may also be used however, fiberboard must be removed from the bottom of the enclosure to provide sufficient clearance for the loudspeaker.

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 Degree conical dispersion (@ 2 kHz)
- Available with factory installed, 60W, 70.7/100V transformer (CX12T60)
- Perfectly suited for use with Atlas Sound "Q" Series enclosures

APPLICATIONS

The 12CX is optimized for high-ceiling applications such as arenas, convention centers, gymnasiums and auditoriums. The extreme high efficiency and higher "Q" of the 12CX, with its powerful 12" 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 12CX is a 250 watt loudspeaker that combines a 12" diameter, low frequency transducer and a 1" exit, true compression driver. The unit features a curvilinear, treated-paper 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 HF driver feature permanently aligned voice coils to assure distortion free performance. The copper voice coils have Kapton® formers. Model 12CX operates within a frequency response range of 45 Hz -18 kHz ($\pm 10\text{dB}$) with a sensitivity of 99dB and a dispersion angle of 90°. The loudspeaker meets functional and aesthetic application requirements by mounting 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 3, 4, and 6 cu. ft. enclosures (see Q Series specification sheet #SL3-1091). In general, loudspeaker performance is significantly enhanced by larger back box size.

Model 12CXT60 identically matches the performance specifications of the 12CX with the addition of a factory installed, high efficiency, 60W, 70.7/100V step down line transformer. Wattage taps are provided at 7.5, 15, 30 and 60 Watts (@70.7V)

Both models are designed to work optimally in any Atlas Sound "Q" series high volume enclosure (Q4612, Q4712, Q4812), allowing for a complete high output solution.

Specifications subject to change without notice



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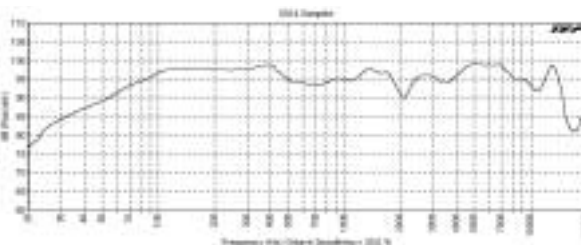
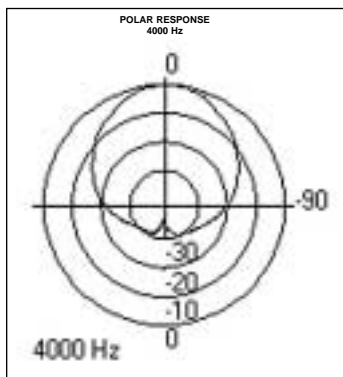
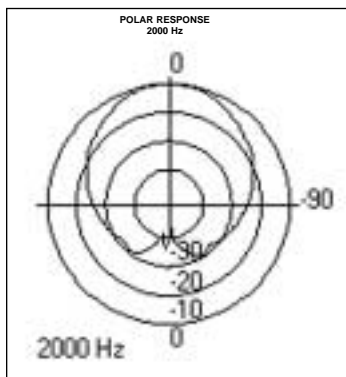
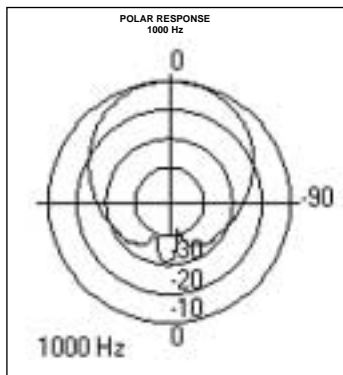
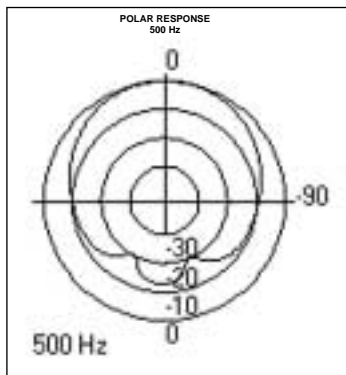
ARCHITECT AND ENGINEER SPECIFICATIONS

12CX

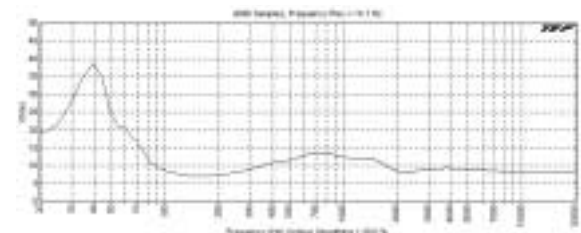
Frequency response range shall be 58 Hz to 15 kHz, ± 3 dB. Sensitivity shall be 99dB at 1 watt, 1 meter. Voice coil impedance shall be 8 ohms (nominal). Low frequency voice coil diameter shall be 2.5" (63.5mm). The maximum depth of the loudspeaker shall not exceed 8" (203mm). The low frequency reproducer cone shall be a full 12" (305mm) in diameter and the high frequency reproducer diaphragm shall be 2.5" (65mm) in diameter. The woofer shall have a 70 oz. (1984g) ceramic magnet. The tweeter shall have a 20 oz. (567g) ceramic magnet. The two reproducer sections shall be coupled through a built-in crossover network. The crossover frequency shall be at 1800 Hz. Conical dispersion shall be 90 degrees at 2kHz. Unit shall be Atlas Sound 12" dia. loudspeaker Model 12CX.

12CXT60

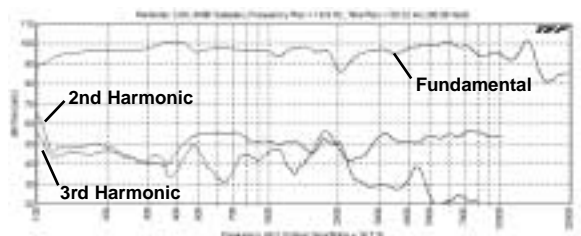
12CXT60 transformer A & E Specifications (All other specifications are identical to the 12CX). Transformer primary voltage shall be 70.7V or 100V with a frequency response range of 33Hz to 21kHz (± 2 dB) and power taps at 7.5, 15, 30 & 60 watts. Insertion loss shall not exceed 1dB.



12CX Frequency Response Measured in Q4812 Enclosure



12CX Impedance Measured in Q4812 Enclosure



Fundamental vs. 2nd & 3rd Harmonics Measured in Q4812 Enclosure

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