

# SM12CXT

## High Performance Coaxial Loudspeaker



### Features

- High Performance AtlasIED Compression Driver Coaxial Loudspeaker in Versatile, Flyable, Wood Enclosure
- Multiple (12) 1/4"-20 Inserts, Providing Fly Points for a Variety of Mounting Configurations
- Includes Internal, High Efficiency 60 Watt 70.7V/100V Transformer (May Be Bypassed for 8Ω Operation)
- Barrier Strip Input for 70.7V/100V/8Ω or Parallel 4 Pole Speak-On Input for 8Ω Operation Only
- Unique Input Panel Allows Use of Standard 4" Square Box Cover (Raco 753 or Eq.) for Applications Where Flex Conduit is Required for Termination
- Fuse Protection for Low and High Frequency Drivers
- Attractive, Heavy-Duty Grille Assembly
- Durable Black or White, Rough-Coat Finish
- Optional Brackets for Wall Mounting
- Pre-Drilled with T-Nut Inserts for Omnimount™ Bracket Wall Mounting

### Applications

The SM12CXT 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.

### General Description

SM Series loudspeakers offer quality sound reproduction and contemporary styling. The SM12CXT features the 12CXT60, a 250W loudspeaker that combines a 12" diameter, low frequency transducer and a 1" exit compression driver. The speaker has a curvilinear, treated-paper cone for lower harmonic distortion, and a built-in crossover network for proper frequency transition between the two reproducers. The low frequency transducer and the high frequency driver feature permanently aligned voice coils for low distortion performance. The copper coils have Polyimide voice coil formers.

The SM12CXT features a wood enclosure with a metal grille. Internal hardware, for flying, includes multiple (12) 1/4"-20 inserts for overhead suspension in almost any orientation.

A 90° conical pattern (2kHz octave band) and amazing efficiency make the SM12CXT a perfect choice for a wide variety of applications including school auditoriums, gymnasiums, cafeterias, church sanctuary systems, and more.

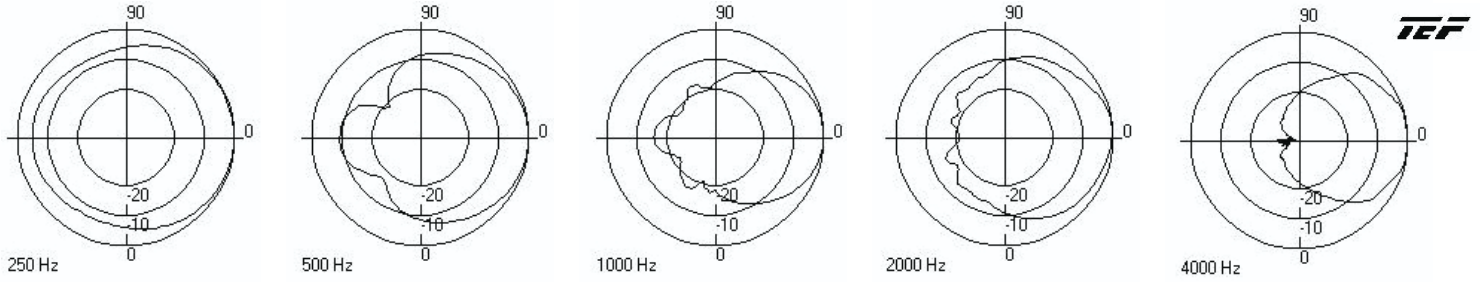
System	
Type	Two Way, Compression Driver Coaxial Surface Mount Loudspeaker
Operation Mode	Non-Powered Passive
Operating Range (-10dB)	45Hz - 18kHz
Frequency Response (+/- 5dB)	55Hz - 15kHz
Vertical Coverage	90° Conical (2kHz)
Horizontal Coverage	90° Conical (2kHz)
Max Input Ratings (8Ω)	250W Continuous
Transformer Taps - 70V	7.5W, 15W, 30W, 60W and Low Impedance (8Ω)
Transformer Taps - 100V	7.5W, 15W, 30W, 60W and Low Impedance (8Ω)
Directivity Factor (Q)	10.47 @ 2kHz
Directivity Factor (DI)	10.20 @ 2kHz
Input Sensitivity at 1W/1m	99dB SPL
Max SPL at 1m (Passive)	117dB (70V @ 60W); 123dB (8Ω @ 250W)
Recommended Signal Processing	80Hz - 20kHz
Recommended Power Amplification	250W at 8Ω
Transducers	
LF Transducer Qty and Size	1 x 12"
LF Voice Coil Size	2.5" (63.5mm)
MF Transducer Qty and Size	N/A
MF Voice Coil Size	N/A
HF Transducer Qty and Size	1 x 1" Exit Compression Driver
Nominal Impedance	8Ω
Minimum Impedance	7.1Ω @ 212Hz
Crossover Frequency	1800Hz
Driver Protection	Fused
Enclosure	
Color	Black or White
Enclosure Material	Wood
Grille Material	Powder Coated CRS
Input Connection	Barrier Strip
Mounting / Rigging Provisions	(12) 1/4"-20 Inserts
Safety Agency Ratings	None
Ingress Protection	IP-21
Logo	Blue / White Removable
Product Dimensions (HxWxD)	19" x 14.5" x 14" (483mm x 368mm x 357mm)
Shipping Dimensions (HxWxD)	22.8" x 19.2" x 18.7" (579mm x 488mm x 475mm)
Net Weight - lbs	39lb (17.7kg)
Shipping Weight - lbs	52lbs (23.6kg)
Warranty Coverage	
Warranty Period	5 Years

**NOTES:**

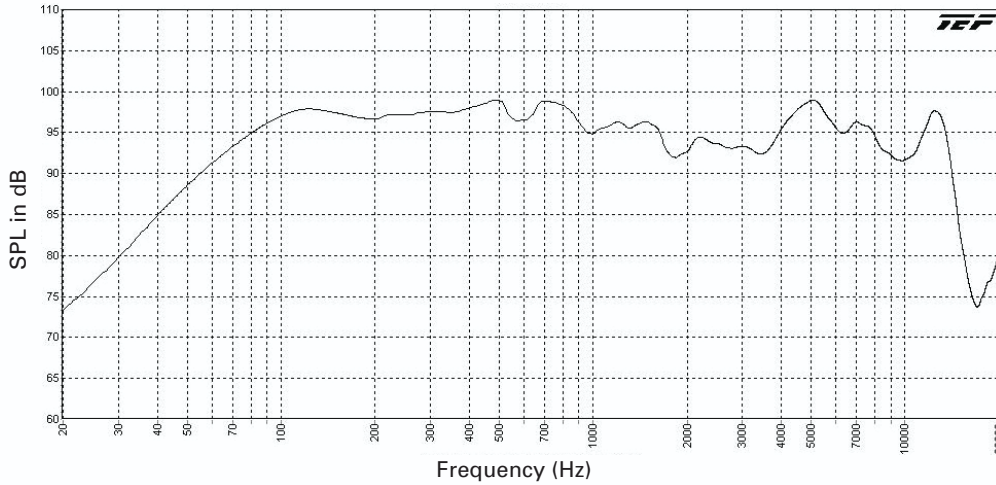
1. Sensitivity: Half space, 1 meter, 2.83 volts RMS.
2. Power: All power figures are calculated using the rated nominal impedance.
3. Frequency response and sensitivity are half-space measurements.

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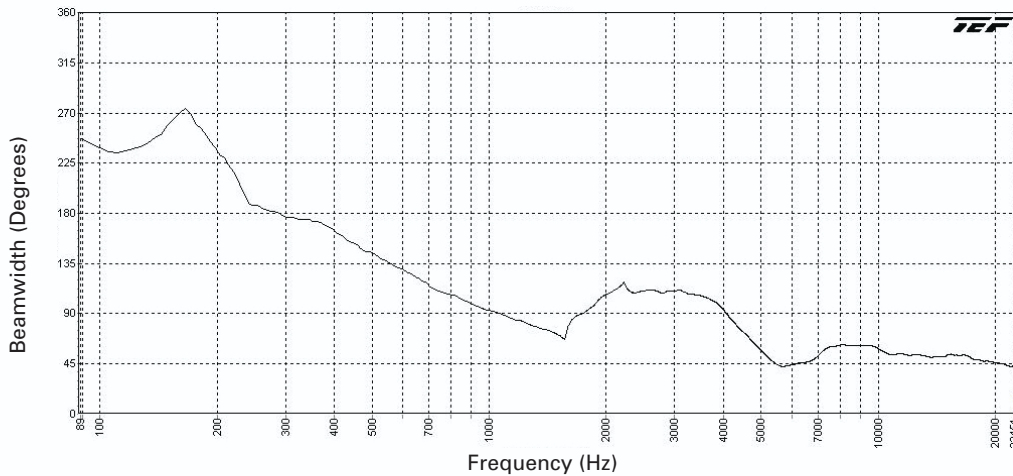
### Polars Are Normalized To Zero On Axis (-6dB)



### Frequency Response

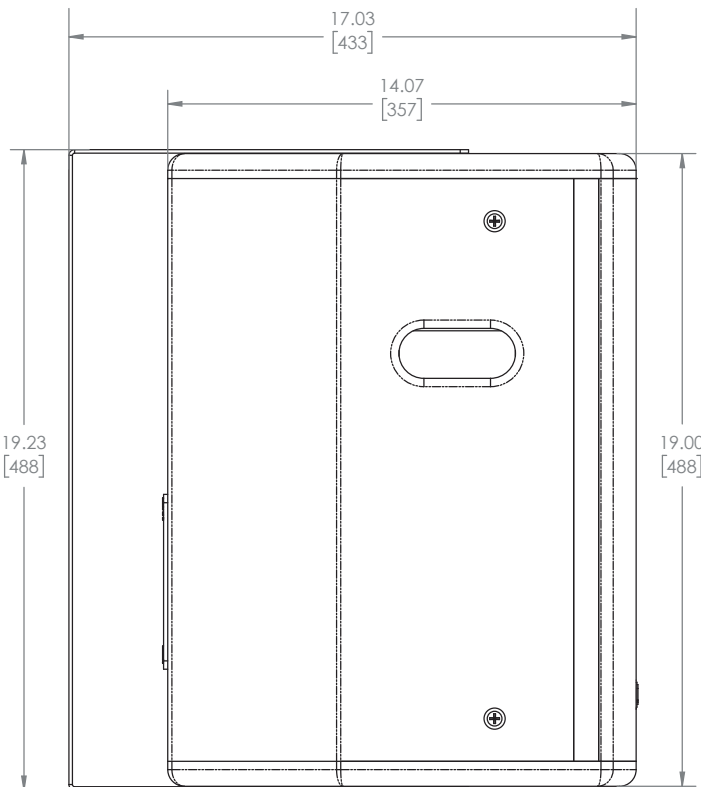
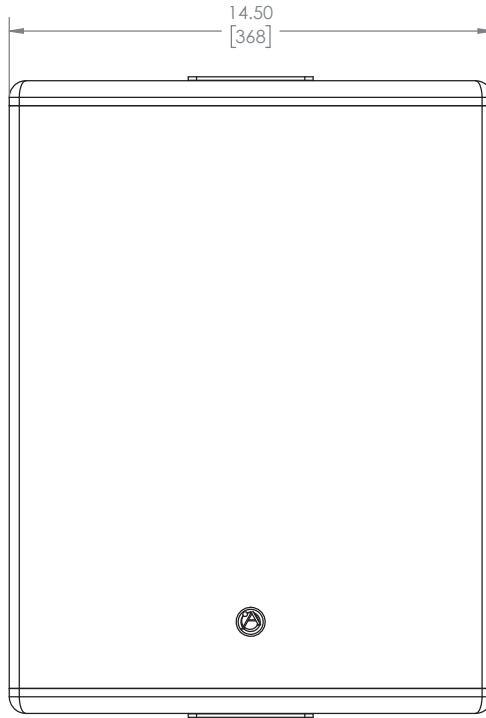


### Beamwidth (-6dB)



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## Dimensional Drawings



## Architect and Engineer Specifications

The loudspeaker system shall be AtlasIED model SM12CTX. Assemblies shall consist of two-way woofer and tweeter assembly within a wood enclosure. The 250 Watt systems shall have a 12.857" (310mm) woofer constructed of treated paper and a 1" (51mm) titanium diaphragm compression driver. Each system shall be complete with a 60 Watt 70.7V/100V transformer. A barrier strip shall allow access to the 7.5, 15, 30, and 60 Watt taps of the transformer. The speaker shall be mounted in a wood enclosure with a metal grille. The enclosure shall provide multiple (12) 1/4"-20 inserts for mounting. Fuse protection for high and low frequency drivers shall be included.