# **FAP8CXT**



### Strategy Series® II Coaxial Loudspeaker System



- Extended Low Frequency Response from the Optimally Tuned & Ported Deep Drawn Galvanized Steel Enclosure (937 in<sup>3</sup>)
- Unique "Trap Door" Input Section Allows for Through Conduit Runs with Rigid or Flex Conduit
- 1" Exit Compression High Frequency Driver Coupled to a Specially Designed Conical Wave-Guide Horn Provides Exceptional Output & Accurate High Frequency Reproduction
- 90° Conical Dispersion (2kHz Octave Band)
- Front Mounted Tap Selector Switch for Easy System Tuning Adjustments (1.9 Watts – 60 Watts @ 70.7V Plus 8Ω Setting)
- Includes C-Ring and V-Rails for Ceiling Mounting
- "Press-Fit" Grille to Better Blend Into Contemporary Architecture

### **Technical Specifications**

 Depth:
 12¾" (324mm)

 Diameter:
 15¾" (401mm)

 Shipping Weight:
 23 lbs (10.43kg)

Frequency Response: 60Hz – 15kHz (±5dB)

Power Taps: 7.5, 15, 30, 7 60 Watts /  $8\Omega$ 

Speaker Type: Coaxial Dispersion: 90°

Sensitivity: 92dB Average

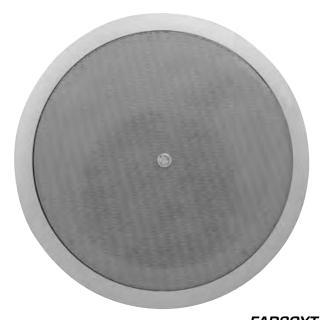
Crossover Frequency: 2kHz

#### **Applications**

The Atlas Sound FAP8CXT is a true compression driver premium performance 70.7V / 100V, tuned & ported 8" coaxial ceiling speaker system. The system is perfectly suited for many business music and public address applications where high ceilings require loudspeakers with increased efficiency and tighter pattern control.

The FAP8CXT System has a 90° dispersion angle and is well suited for higher ceiling applications where tighter pattern control is required.

The FAP8CXT features a curvilinear, polypropylene cone for lower harmonic distortion and a built-in 2kHz crossover network for proper frequency transition between the two transducers. This loudspeaker is factory assembled in an optimally tuned & ported deep drawn enclosure and includes a specially designed 60 Watt high performance 70.7V / 100V transformer. A convenient, front mounted, multi-position selector switch allows tap adjustment without the need to remove the speaker from the ceiling. This tap selector switch also includes a transformer bypass setting for instances where the FAP8CXT driver is direct coupled to a low impedance amplifier.







#### **Mounting Accessories**

Mounting is simplified with Strategy Series® style "dog leg" tabs that allow easy installation into drop tile or drywall ceilings with provided tile bridge assembly. The tile bridge consists of two V-Rails and a C-Ring assembly. The C-Ring can be attached to the rails with the screws provided to extend support to the T-Bar grid in suspended ceiling applications. Multiple hole locations are provided to allow the C-Ring to be positioned to the outer edge of the tile if necessary.

For existing drywall applications the tile bridge C-ring and support rails can be inserted into the hole cut for the FAP8CXT. For easy positioning the V shaped support rails match the shape of the C-ring tabs for easy maneuvering and location when working "blindly" above the deck. This technique is recommended to distribute the weight of the system across a wider area of the ceiling.

A uniquely designed "easy access" input panel on the side of the enclosure allows conduit runs using flexible or rigid conduit. Below this cover resides a detachable Phoenix style locking four-pole connector for field wiring connection and pass-through.

The package includes an attractive press-fit grille, which nicely matches contemporary architecture.

For new construction drywall ceiling applications, the optional FAP82-TR trim ring is available. This unit provides a marked location for drywall installers to cut around, essentially reserving the desired location in the ceiling until final installation of FAP8CXT is completed. Mounting holes are provided to accommodate 16" or 24" OC stud / joist mounting.

With the FAP8CXT, Atlas Sound has addressed pendant mounting for open ceiling applications. An eyebolt assembly is incorporated into the package allowing suspension of the FAP8CXT with load rated cable, "all thread" or other load rated hardware. The enclosure is finished white to match the bezel ring for better blend in open ceiling applications. Please note that the enclosure/bezel ring may also be painted to accommodate custom finishes when required.

SPEAKER SYSTEMS SUSPENDED OVERHEAD POSE A RISK OF SERIOUS INJURY OR DEATH IF THEY FALL.

Overhead suspension of any object (rigging) is inherently dangerous. It poses a substantial risk of injury or death to both those persons performing the installation and those persons who may later occupy the space under the suspended objects. You may be held liable for any injury or damages which may be alleged to result from improper installation.

IF YOU ARE NOT EXPERIENCED IN RIGGING OR SUSPENSION OF SPEAKER SYSTEMS, OR IF YOU HAVE ANY DOUBT THAT YOU ARE QUALIFIED TO INSTALL SUSPENDED SPEAKER SYSTEMS, DO NOT PROCEED.

Instead, you should obtain the services of properly qualified personnel to complete the installation.

NEVER SUSPEND THE SPEAKER SYSTEM BY ANY ATTACHMENT EXCEPT THE PROVIDED SUSPENSION POINT.

The eyebolt must be used with an auxiliary support cable in drop tile installations. NOTE: it is MANDATORY that the secondary support be utilized in drop ceilings for safety and seismic considerations).

#### **Architects and Engineers Specifications**

The loudspeaker system shall be Atlas Sound FAP8CXT. System shall include a high performance 8" coaxial loudspeaker, ported bass reflex enclosure and press-fit grille for conventional ceiling installation.

Frequency response for the system shall be 60Hz – 15kHz (±5dB). Sensitivity shall be 92dB average.

The 150 Watt loudspeaker systems shall have a 8.25" (310mm) woofer constructed with polypropylene cone and a 1" (25mm) titanium diaphragm compression driver. Woofer magnet shall be a minimum of 25oz (708.7g) and the tweeter shall have a 20oz (567g) ceramic magnet. The two transducer sections shall be coupled through a built-in 2000Hz multi-pole crossover network.

Transformer shall be (70.7V / 100V) volt type with 1.9, 3.8, 7.5, 15, 30, and 60 watt primary taps (@70.7V) with a front mounted tap selector switch. This tap selector switch shall also include a transformer bypass setting for instances where the FAP8CXT driver is to be direct coupled to a low impedance amplifier.

Enclosure shall be a deep drawn steel enclosure design acoustically treated with fiber lining. Internal volume shall be 937 in³. To facilitate connection in conduit systems, enclosure shall be equipped with an access panel covering a recessed terminal cup. This cover shall provide a combination (19mm inside diameter) / 1" (25mm inside diameter) knock-out on the side access and a top access cover compression fitting/strain relief to facilitate flexible conduit up to 22mm outside diameter or 1" (25mm inside diameter) when the compression fitting is removed.

External wiring shall be accomplished via a removable lockable wiring connector with screw-down terminals to provide both secure wire termination and pre-wiring capability before loudspeaker installation. The 4 pole locking connector shall be located in the recessed area behind the conduit access panel and provide for pass-through connection.

A ¼"–20 drop forged eyebolt, factory installed into the top of the enclosure for additional suspension point when used in drop tile ceilings or for pendant mounting.

Construction of enclosure shall be a minimum of 18-gauge deep drawn metal finished in white epoxy.

The system shall include a support backing plate to reinforce the ceiling material and tile support rails for use on either 2's x 4' (609mm x 1219mm) or 2' x 2' (609mm x 609mm) suspended ceiling tiles. This assembly can all be installed from beneath the ceiling tile. If the FAP8CXT is to be mounted into a suspended ceiling it is required that the system be supported from above and secured to a structural building member member approved for this purpose.

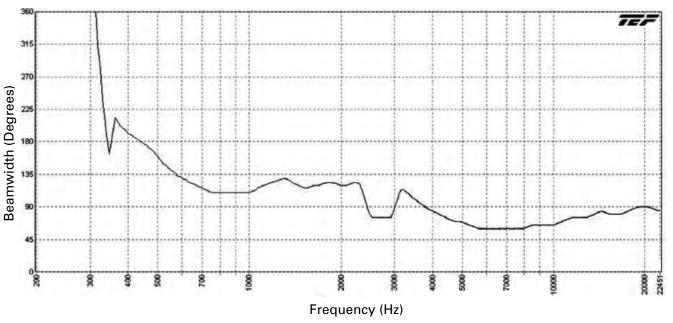
Overall front face diameter shall not exceed 15.75" (400mm); overall height shall not exceed 12.75" (324mm) including factory-installed eyebolt.

Grilles shall be press-fit, manufactured from 24-gauge perforated steel mesh and finished in white epoxy. Round grille shall be 13.67" (347mm) diameter.

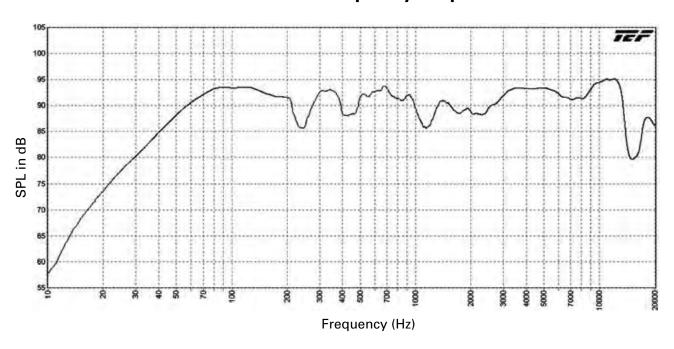
The loudspeaker shall weigh no more than 13.9 lbs (6.3 kg)

The loudspeaker shall be the Atlas Sound FAP8CXT.

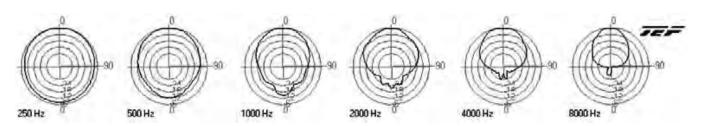




# **FAP8CXT Frequency Response**

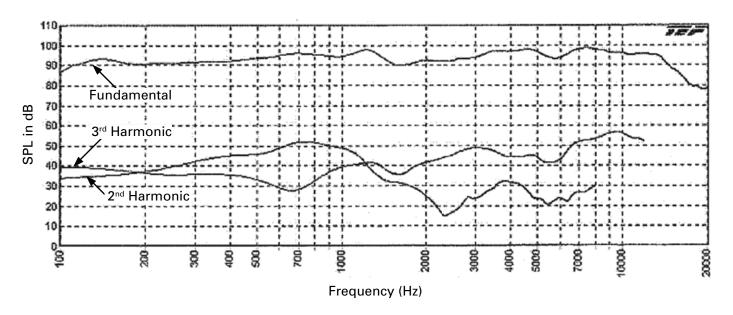


## FAP8CXT Polars (Normalized to Zero on Axis) (-6 dB)





### **FAP8CXT Harmonic Distortion**



## **FAP8CXT Impedance (Ohms) vs Frequency**

