

FAP42TCEN

Strategy Series® II Low Profile In-Ceiling 4" Coaxial Speaker



Features

- Low Depth (4") Speaker System for Limited Space Applications
- Easy Installation in Drop Tile or Sheetrock Ceilings Via C-Ring / V-Rail Tile Bridge and "Dog Leg" Mounting System (Included)
- Front Mounted Tap Selector Switch for Easy System Tuning Adjustment Includes Transformer Bypass Setting for 8Ω Direct Coupled Operation
- "Press Fit" Grilles Blend Better into Contemporary Architecture
- Enhanced Quality 70.7V / 100V Internal Transformers Minimize Insertion Loss and Maintain Low Frequency Response While Providing Increased Output for Higher SPL Applications
- EN54-24 Certified
- ISO 7240-24 Certified
- Ingress Protection (EN54-24): IP21C

Applications

The EN54-24 certified FAP42TCEN combines superior coaxial loudspeaker performance with wide dispersion and easy installation. A low profile enclosure and wide coverage make the FAP42TCEN a perfect choice for low ceilings. The FAP42TCEN will satisfy the needs of owners, architects, contractors, and consultants by delivering true, high fidelity sound reproduction in an attractive and easy-to-install system. The FAP42TCEN is ideal for high-intelligibility voice, music, and signal reproduction in commercial, industrial, and institutional applications.

General Description

The EN54-24 certified FAP42TCEN's 130° dispersion angle effectively reduces the number of loudspeakers necessary to achieve coverage in distributed systems with low ceilings. The loudspeaker component matches the performance of the legendary AtlasIED Strategy FA Series. High quality construction 4" coaxial cone type driver includes a 1" voice coil and polypropylene cone with a butyl rubber surround. The 19mm coaxially mounted tweeter is constructed of PEI. This loudspeaker is factory assembled in a deep drawn enclosure and includes a specially designed 16 watt low saturation, 70.7V / 100V transformer. A convenient front mounted selector switch allows tap selection without the need to remove the speaker from the ceiling. This switch also includes a transformer bypass setting for 8Ω operation.

Specifications

Power Rating	25 Watts (8Ω)
Transformer Taps	1, 2, 4, 8, & 16 Watts & 8Ω Bypass
Frequency Response	75Hz – 20kHz (±5dB)
Sensitivity	(1W / 1M) 88dB
EN54-24 Sensitivity	(1W/4m): 72dB
Woofer	4" Poly Cone with Butyl Rubber Surround
Woofer Magnet Weight	10oz (364g)
Enclosure Volume	134 in ³
HF Driver	Coaxially Mounted PEI Dome Tweeter
Diameter	10 1/2" (267mm)
Overall Height	4 1/4" (108mm)
Cut-Out Diameter	9" (229mm)

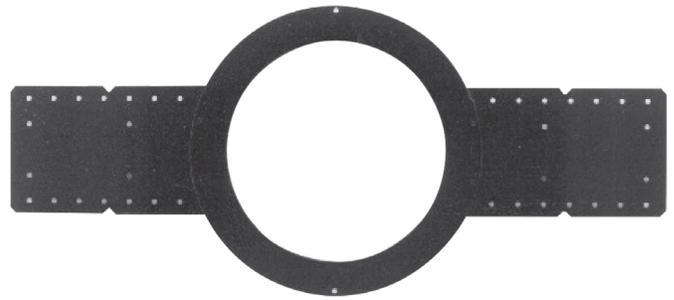
Mounting Accessories

Mounting is simplified with Strategy 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” shaped formed mounting 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 dry-wall applications the tile bridge C-Ring and support rails can be inserted into the hole cut for the FAP42TCEN. 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. A uniquely designed “easy access” input panel on the side of the enclosure allows for conduit runs using flexible conduit. Wiring terminals are concealed below this cover for easy daisy chain wiring to other full range loudspeakers or Atlas Sound FAPSUB subwoofers. The package includes an attractive press-fit grille which nicely matches contemporary

architecture. For new construction drywall ceiling applications, the optional FAP42-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 FAP42TCEN. Mounting holes are provided to accommodate 16" or 24" OC stud / joist mounting. A support ring is also provided on the top of the FAP42TCEN enclosure to facilitate an auxiliary support cable. It is recommended that this secondary support be utilized in drop ceilings for safety and seismic considerations.



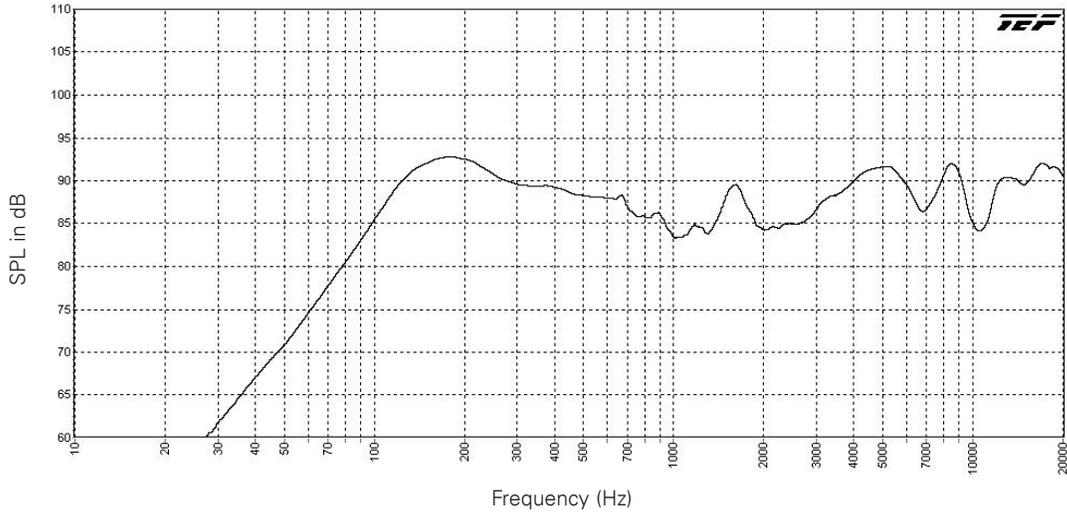
C-Ring / V-Rails



FAP42-TR

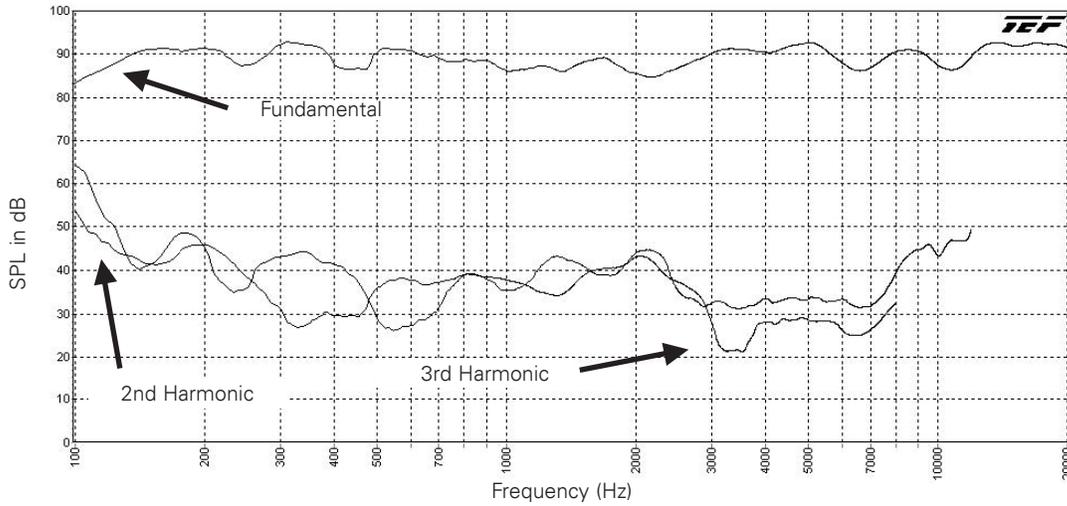
FAP42TCEN

Frequency Response



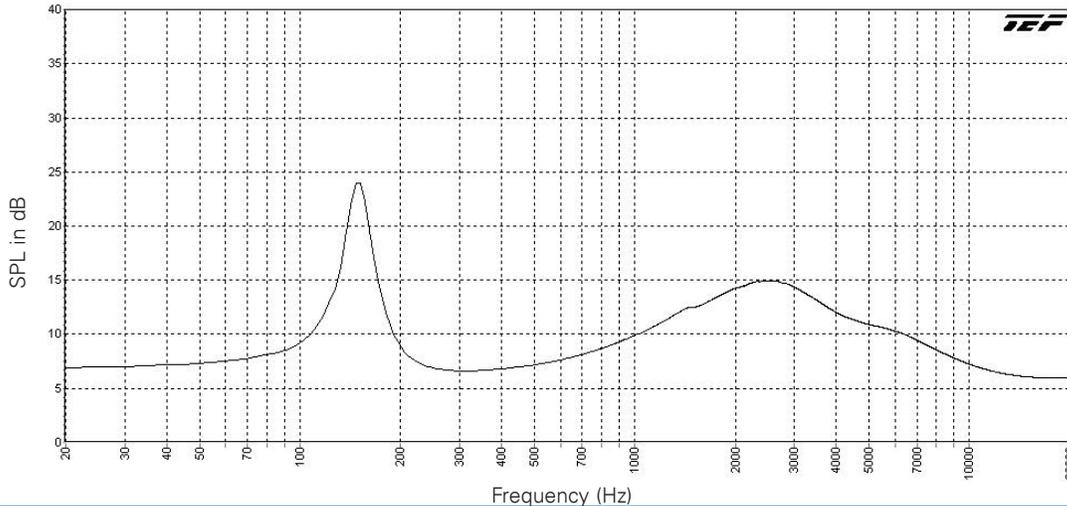
FAP42TCEN-W

Harmonic Distortion

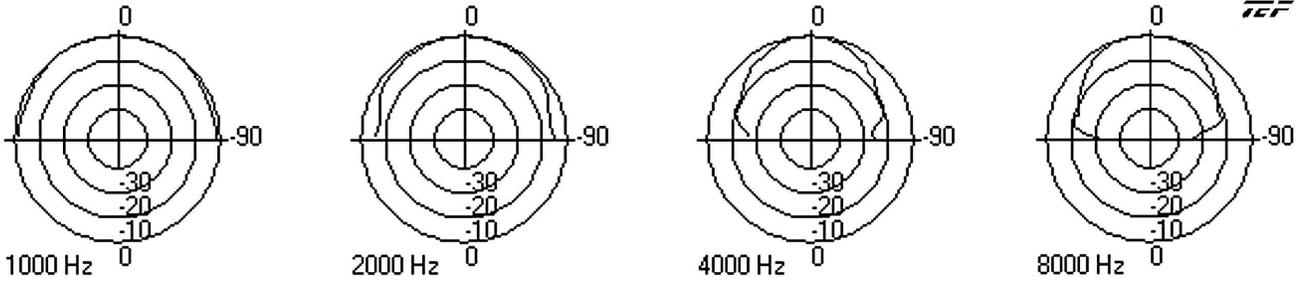


FAP42TCEN

Impedance (Ohms) vs Frequency



FAP42TCEN Polars (Normalized to Zero on Axis) (-6dB)



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Architect and Engineer Specifications

The loudspeaker system shall be AtlasIED FAP42TCEN System shall include a high performance 4" coaxial loudspeaker, low profile enclosure and press-fit grille for conventional ceiling installation.

Frequency response for the system shall be 75Hz – 20kHz (± 7 dB).

Sensitivity shall be 72dB (1W/4m) average. Loudspeaker shall be comprised of a 4" coaxial cone type driver. Cone shall be constructed of polypropylene with a butyl rubber surround. The 19mm tweeter shall be constructed of PEI. Magnet shall be a minimum of 10oz (264g) and the voice coil diameter shall be 1" (25mm).

Transformer shall be a 70.7V / 100V type with 1, 2, 4, 8, and 16 watt primary taps (@70.7V) with a front mounted tap selector switch to include transformer bypass setting for 8 Ω direct coupled operation.

Enclosure shall be constructed of deep drawn steel. Internal volume shall be 134 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 3/4" (19mm inside diameter) / 1" (25mm inside diameter) knock-out to conduit.

External wiring shall be accomplished via wiring connector with screw-down terminals to provide secure wire termination. The connector shall facilitate In / Out wiring and shall be located in the recessed area behind the conduit access panel.

Seismic support eye shall be provided for an additional suspension point when used in drop tile ceilings. Construction of enclosure shall be a minimum of 18-gauge deep drawn galvanized metal.

The system shall include a support backing plate to reinforce the ceiling material and tile support rails for use on either 2' 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. Overall front face diameter shall not exceed 10.5" (267mm); overall depth from the bottom of bezel to top of enclosure shall not exceed 4.24" (108mm). Grilles shall be press-fit, manufactured from 24-gauge perforated steel mesh and finished in white epoxy. Round grill shall be 8.49" (216mm) diameter.

The loudspeaker shall be the Atlas Sound FAP42TCEN.