

SF 3CT LP

FULL-RANGE 3" SOUNDFIELD XD
CEILING SPEAKERS WITH 4" LOW
PROFILE COMPOSITE BACK CAN
AND 70/100 V TRANSFORMER



The Extron SF 3CT LP is a full-range ceiling speaker featuring a 4" deep low profile composite back can. The redesigned 3" (7.6 cm) full-range driver features a wider and smoother frequency range of 65 Hz to 20 kHz and is engineered with an extremely wide conical dispersion of 165°. The SF 3CT LP speaker is ideally suited for small to medium applications with lower ceilings and low to medium power requirements.

- ▶ 4" (10.2 cm) deep, low profile, plenum rated, composite back can
- ▶ 3" (7.6 cm) full-range driver with a tuned port
- ▶ Frequency range: 65 Hz to 20 kHz
- ▶ 165° conical dispersion
- ▶ 16 watts continuous pink noise, 32 watts continuous program
- ▶ 8 ohm direct or 70/100 volt operation
- ▶ Magnetically attached grille with a thin bezel for a refined appearance
- ▶ Grille and bezel are white and can be painted to match any environment
- ▶ Separable back can and speaker baffle supports both single-trade and division-of-labor applications
- ▶ Modular V-rail and folding C-ring kit
- ▶ Cable/conduit access plate can be oriented for side or top mount connections
- ▶ Opti-Torque indicator rings prevent overtightening of locking arm screws
- ▶ Three locking arms for quick ceiling installation
- ▶ UL 2043 plenum rated enclosure
- ▶ Dimensional and weight savings, reduces overall storage and shipping costs
- ▶ 5-year parts and labor warranty



Extron Electronics
INTERFACING, SWITCHING AND CONTROL

DESCRIPTION

The Extron SoundField® XD model **SF 3CT LP** is a 3" full-range ceiling speaker featuring a 4" (10.2 cm) deep composite back can for use in plenum rated ceiling environments. This low profile speaker is ideal for ceiling installations with above-the-ceiling space issues, such as air handling ducts installed close to the ceiling.

Featuring the AV industry's first UL 2043 listed composite speaker enclosure, the SF 3CT LP meets stringent UL requirements for smoke and heat release in plenum air spaces. A magnetically attached grille with a thin-edged bezel gives the SF 3CT LP a refined appearance. The SF 3CT LP allows both direct 8 ohm and 70/100 volt operation with a behind-the-grille, six position power selector switch. With 70/100 volt taps at 1, 2, 4, 8 and 16 watts, the SF 3CT LP will handle most of your distributed audio needs.

The 3" (7.6 cm) full-range driver features a wider and smoother frequency range of 65 Hz to 20 kHz and is engineered with an extremely wide and well controlled conical dispersion of 165°. This design reduces beaming of mid and high frequencies directly under the speaker. Vocal intelligibility is critical for voice lift applications, and the SF 3CT LP provides excellent voice clarity. A power rating of 32 watts continuous program also gives this speaker plenty of headroom for music reproduction.

The SF 3CT LP represents a new paradigm in speaker technology for pro AV applications. We started fresh and designed the SF 3CT LP from the ground up. With innovative materials, modular construction, and many other unique features, these new SoundField XD speakers provide significant savings and superior performance.

SPECIFICATIONS

AUDIO/ACOUSTIC AND ELECTRICAL	
Speaker type	Low profile ceiling speaker with composite back can
Frequency range	65 Hz to 20 kHz, -10 dB, half space (per IEC 60268-5)
Frequency response	265 Hz to 19 kHz, +/-3 dB, half space
Power capacity	16 W (rms) continuous pink noise (per IEC 60268-5) 32 W (rms) continuous program
Nominal sensitivity	83 dB SPL, 1 W, 1 m, 8 ohms direct, half space (per IEC 60268-5)
Nominal coverage angle	165° conical coverage (1 kHz to 4 kHz)
Nominal impedance	8 ohms
Rotary switch taps	70V: 16 W, 8 W, 4 W, 2 W, 1 W, 8 ohms direct 100 V: null, 16 W, 8 W, 4 W, 2 W, 8 ohms direct
Driver	(1) 3" (76 mm) paper cone
Input connector	(1) 5 mm captive screw connector, 4 pole for 1 input and 1 loop-through
GENERAL	
Package	2 speakers (1 pair)
Temperature/humidity	Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing
Mounting	Ceiling mountable with included hardware: V-rails for 2' x 4' (600 mm x 1200 mm) ceiling tiles, and C-rings

FEATURES

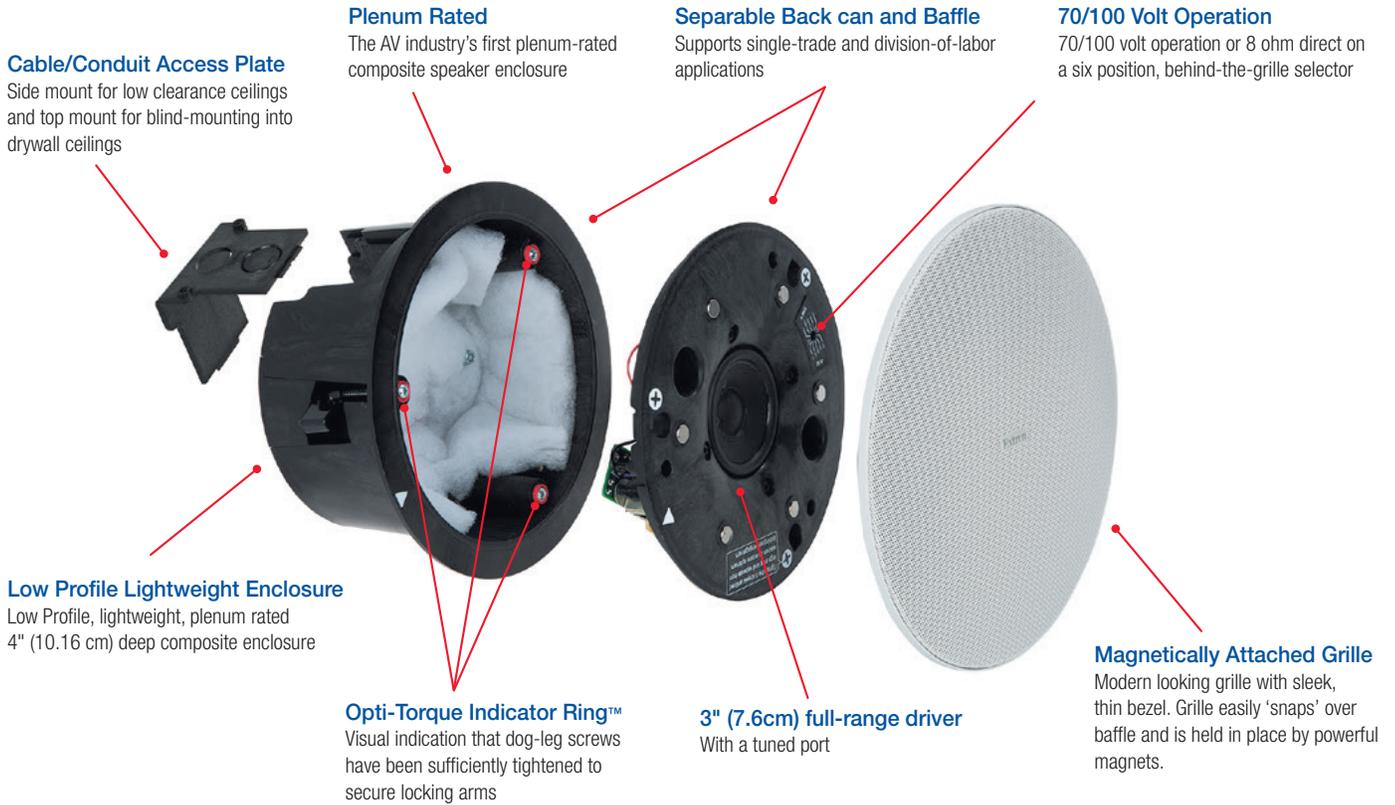
- ▶ **4" (10.2 cm) deep low profile composite back can for plenum environments**
- ▶ **3" (7.6 cm) full-range driver with a tuned port**
- ▶ **Frequency range: 65 Hz to 20 kHz**
- ▶ **165° conical dispersion**
- ▶ **16 watts continuous pink noise, 32 watts continuous program**
- ▶ **8 ohm direct or 70/100 volt operation on a six position, behind-the-grille selector**
 - 8 ohm direct
 - 70 volt: 16, 8, 4, 2, and 1 watt selectable
 - 100 volt: 16, 8, 4, and 2 watt selectable
- ▶ **Magnetically attached grille with a thin bezel for a refined appearance**
- ▶ **Grille and bezel are white and can be painted to match any environment**
- ▶ **Separable back can and speaker baffle supports both single-trade and division-of-labor applications**
- ▶ **Modular V-rail and folding C-ring kit**
- ▶ **Cable/conduit access plate can be oriented for side or top mount connections**
- ▶ **Opti-Torque indicator rings prevent overtightening of locking arm screws**
- ▶ **Three locking arms for quick ceiling installation**
- ▶ **UL 2043 plenum-rated enclosure**
- ▶ **Dimensional and weight savings reduce overall shipping and storage costs**
- ▶ **5-year parts and labor warranty**

Enclosure type	Plenum rated, fire-resistant (UL94V-0) composite back can/baffle; Magnetically attached powder-coated steel grille with plastic bezel.	
Enclosure outer dimensions	4.4" H x 8.9" diameter (112 mm x 226 mm diameter) 4.0" H (102 mm H) from front of ceiling tile to top of enclosure	
Cutout dimensions	7.6" diameter (191 mm diameter)	
Product weight	3.6 lbs (1.6 kg) each	
Regulatory compliance		
Safety	CE, UL 2043, UL1480, NFPA 90A, NFPA 70 UL Listed for use in plenum airspaces: UL 2043 listed for heat and smoke release, UL 1480 listed for commercial and professional audio systems	
Environmental	RoHS, WEEE	
Warranty	5 years parts and labor	
NOTE: All nominal levels are at ±10%.		
Model	Version Description	Part number
SF 3CT LP	3" Ceiling Speakers, Low Profile, 70/100V, Pair	60-1311-03

For complete specifications, please go to www.extron.com
Specifications are subject to change without notice.

THE CEILING SPEAKER REIMAGINED

The SF 3CT LP represents a new paradigm in speaker technology for pro AV applications. With innovative materials, modular construction, and many other unique features, these new SoundField XD speakers provide significant savings and superior performance. The Extron SF 3CT LP is a 3" full range ceiling speaker, featuring a 4" deep low profile composite back can for plenum rated ceiling environments. It is ideal for installations with tight space issues above the ceiling caused by HVAC, plumbing, and conduit.

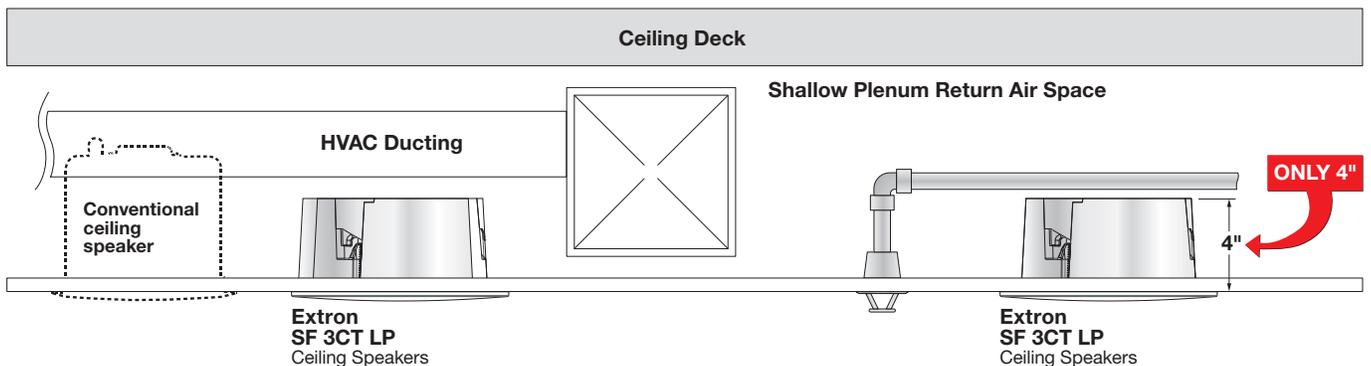


LOW PROFILE, LIGHTWEIGHT, AND PLENUM RATED

The ideal speaker enclosure needs to be constructed in such a way as to avoid internal standing waves and resonances in the enclosure itself. It should also be lightweight and fire tested for use in plenum air-handling spaces.

Our engineers delved deeply into composite materials research and, as a result, were able to achieve all of these requirements by injection molding the enclosure with a fire resistant composite material. The result is a rigid, acoustically damped, and lightweight plenum rated enclosure. The AV industry's first UL 2043 plenum rated composite enclosure.

“ Up to 37% less weight than other 3" ceiling speakers ”



DESIGNED FOR THE INTEGRATOR

Two-Piece Design for Installation Flexibility

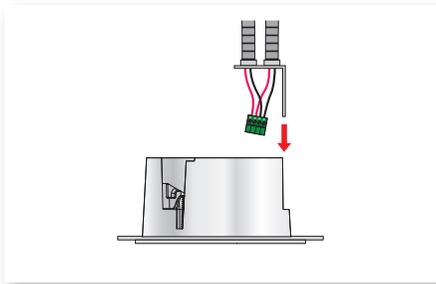
Shipped as a complete speaker assembly, the SF 3CT LP is ideal for both single-trade and division-of-labor installations. The SF 3CT LP speaker can be installed by a single contractor as a self-contained unit for retrofits and new construction. For larger projects with multiple trades, the speaker baffle and back can can be separated, allowing the rough-in contractor to install and fully terminate the back can. Once the job site is clean and secure, the AV integrator can then easily install the speaker baffle and grille.



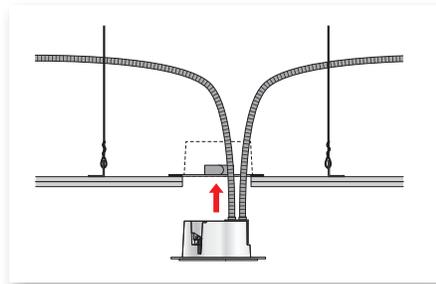
Versatile Cable/Conduit Access Plate

The cable/conduit access plate is used to bring speaker cable into the enclosure, whether free-pulled or through flex conduit. The cable/conduit access plate has two punch-outs for 1/2" conduit, flex, or screw clamp fittings. Two punch-outs allow easy daisy chaining from speaker to speaker. The cable/conduit access plate can also be oriented for side mount or for top mount.

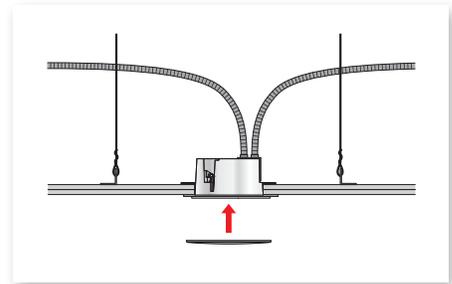
The top mount orientation allows for blind-mounting into drywall ceilings, keeping all cable/flex/conduit connections on the top (see below).



Install Cable/Conduit Access Plate

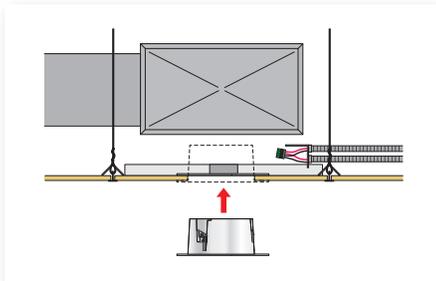


Mount Speaker in Ceiling

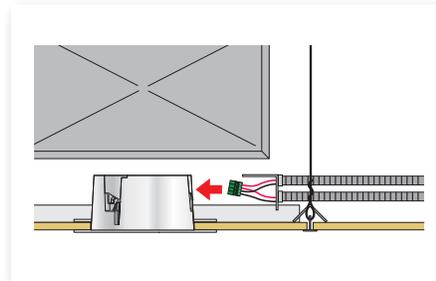


Install Grille

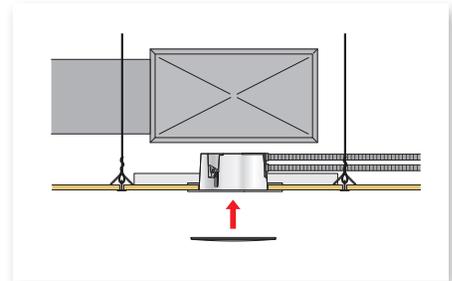
The side mount orientation allows cable/flex/conduit to enter into the side of the enclosure, keeping the overall 4" depth of the speaker (see below).



Mount Speaker in Ceiling



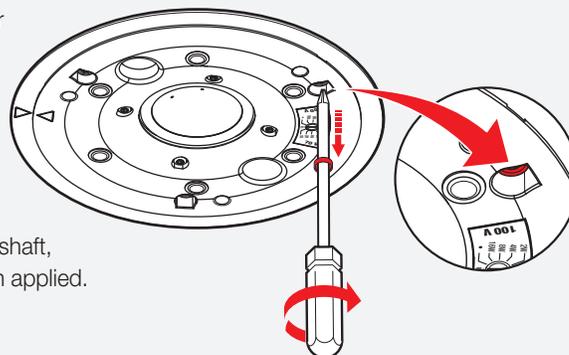
Install Cable/Conduit Access Plate



Install Grille

Opti-Torque Indicator Rings

The SF 3CT LP features exclusive Opti-Torque™ indicator rings that provide a visual indication when the locking arm screws have been sufficiently tightened, preventing damage to the speaker caused by overtightening. When the installation technician is tightening the locking arms, the red Opti-Torque™ indicator ring audibly snaps when the proper torque has been applied. As a visual indicator, the red ring drops down onto the screw-driver shaft, signaling to the technician that the proper force has been applied.



MODULAR V-RAILS AND FOLDABLE C-RINGS

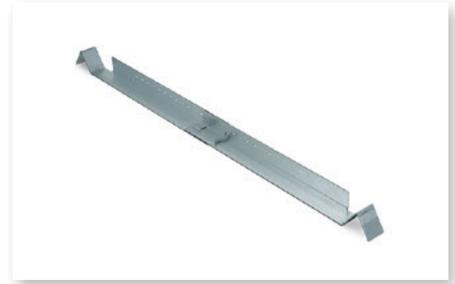
To facilitate installation in a T-bar ceiling, modular V-rails and foldable C-rings are included with the SF 3CT LP. The V-rails have been designed as a two-part assembly that can be snapped together in the field.



Put Two Pieces Together at 90° Angle



Straighten to 180° Angle



V-Rail Locks into Place

The foldable C-rings have been designed to make it easier to get them into place, even in blind-mount drywall applications. You snake the C-ring up through the speaker cut-out hole, unfold it, and position it as needed. The result is a continuous metal support around the entire cut-out, resulting in a more secure attachment to the ceiling.



Insert C-Ring in Ceiling



Spread Open C-Ring

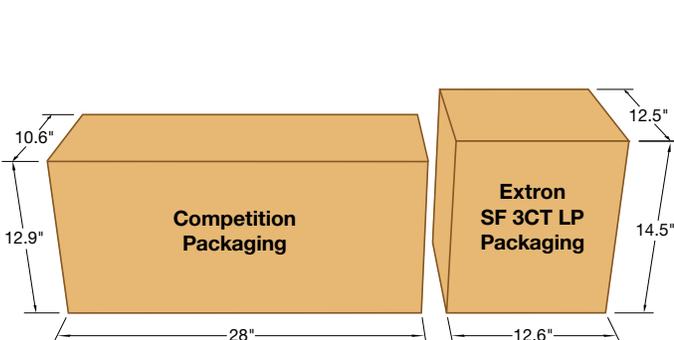


Lay Flat

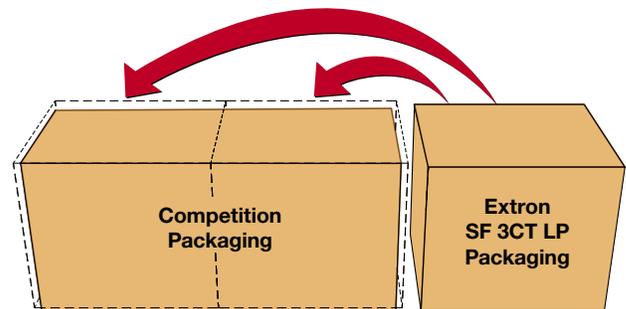
Dimensional and Weight Savings

Several design innovations enable us to package each pair of SF 3CT LP speakers in a compact box measuring only 12.6"L by 12.5"W by 14.5"H. The box contains two speakers, two speaker grilles, two foldable C-rings, and two sets of modular V-rails. As such, the packaging is up to 40% smaller by volume than that of similar competitor products. This means that up to 65% more speakers can fit on a standard pallet. This reduces shipping and storage costs, especially in a bonded warehouse.

The packaged products weigh up to 20% less than similar products. But the greater savings comes in dimensional shipping weight, which can be up to 40% lower for both domestic and international shipping. Less weight means reduced shipping costs.



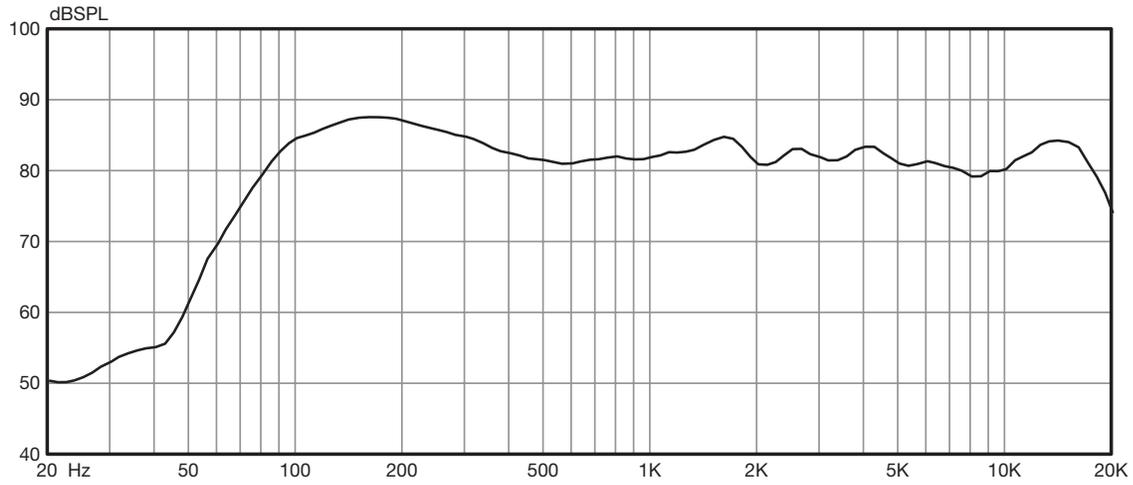
SF 3CT LP packaging compared to competition



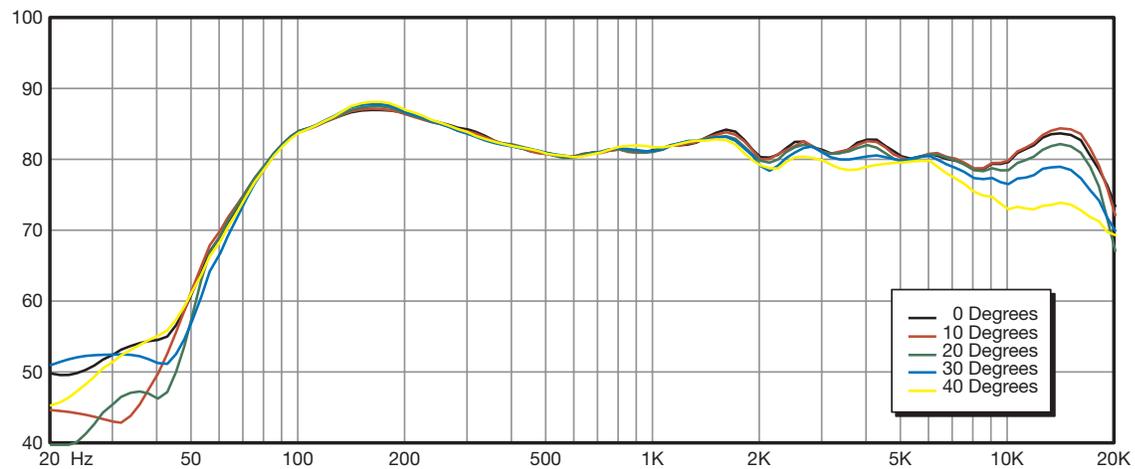
Two SF 3CT LP packages can fit in the same space as one of the competitor's products.

RESPONSE GRAPHS - FREQUENCY AND IMPEDANCE

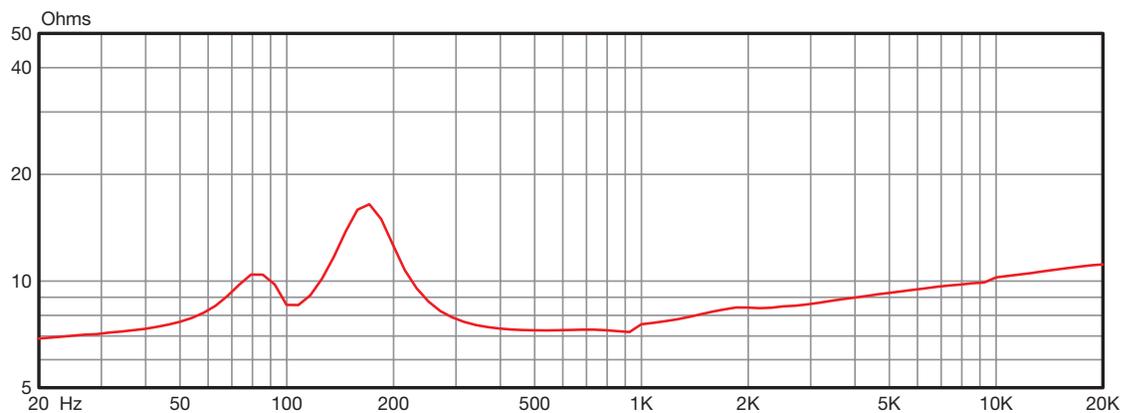
SPL VS. FREQUENCY - 1 WATT @ 1 METER RESPONSE, HALF SPACE (2π)



SPL VS. FREQUENCY - HORIZONTAL OFF-AXIS RESPONSE, HALF SPACE (2π)

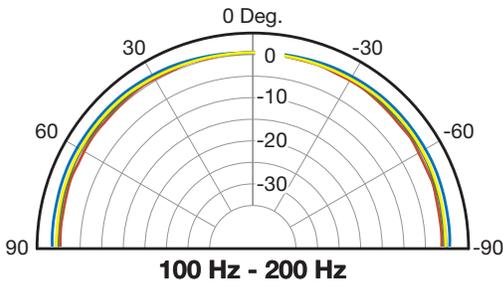


IMPEDANCE VS. FREQUENCY

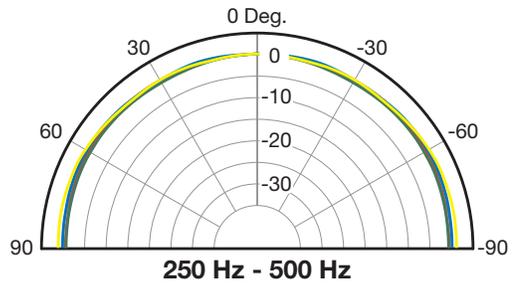


POLAR GRAPHS - 1/3 OCTAVE, Horizontal

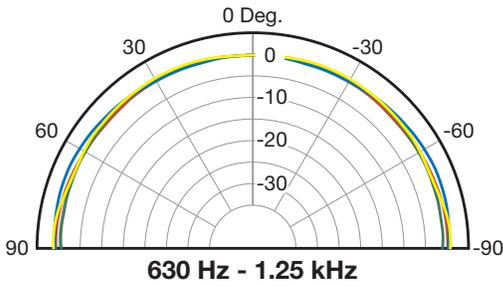
100.00 Hz 160.00 Hz
 125.00 Hz 200.00 Hz



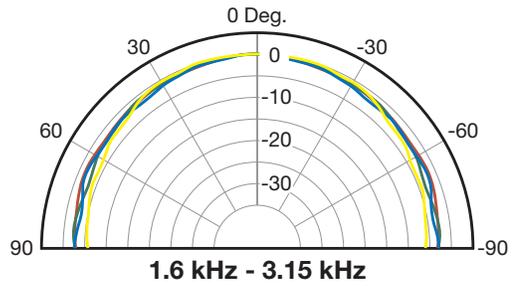
250.00 Hz 400.00 Hz
 315.00 Hz 500.00 Hz



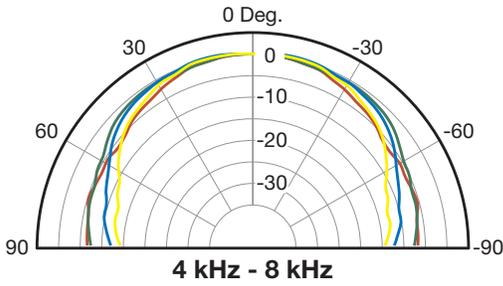
630.00 Hz 1.00 kHz
 800.00 Hz 1.25 kHz



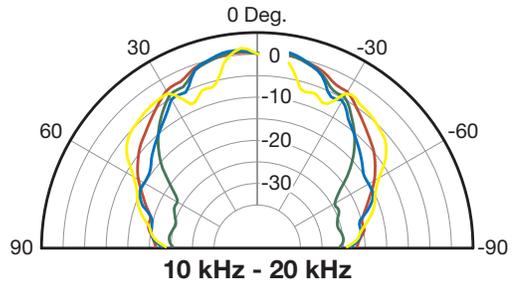
1.60 kHz 2.50 kHz
 2.00 kHz 3.15 kHz



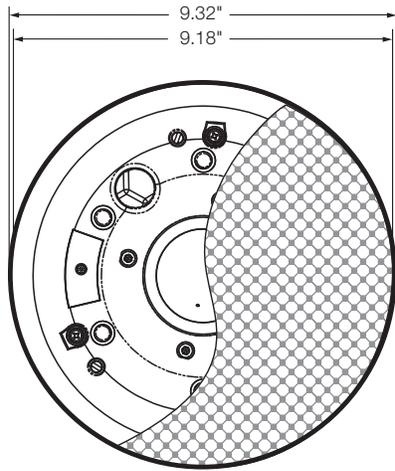
4.00 kHz 6.30 kHz
 5.00 kHz 8.00 kHz



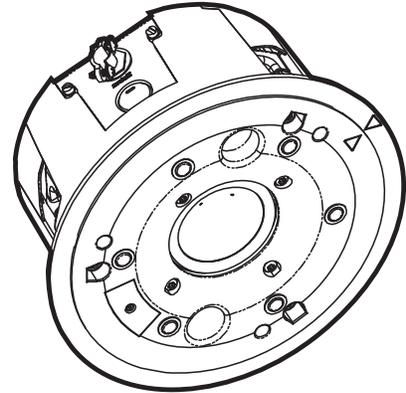
10.00 kHz 16.00 kHz
 12.50 kHz 20.00 kHz



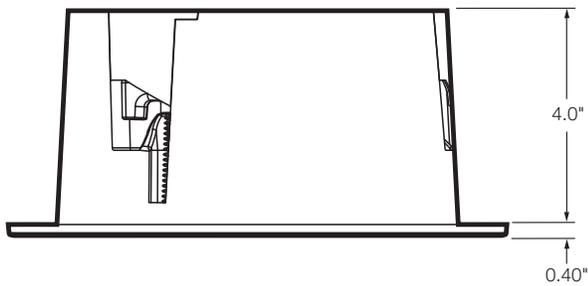
PANEL DRAWINGS



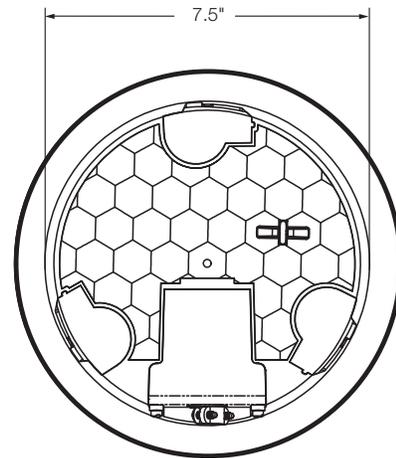
Front View



Isometric View



Side View



Rear View

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