



### Description

The SSE 15 is designed for professional permanent installations where cabinets must be flown in order to cover as much area as possible. The SSE 15 is designed for arraying on stage, churches auditoriums or theme parks. The horn has a coverage pattern of 90° in the horizontal axis and 40° in the vertical axis. The highs are generated using the highly acclaimed Peavey 14XT titanium compression driver. The Sound Guard IV tweeter protection network is built in for driver protection. The low end is produced using the Peavey Scorpion Pro 1500+ 15" woofer with 2.5" (64 mm) voice coil. Connections are made using a four-pin Neutrik® Speakon® or a paralleled two-position terminal block for additional cabinets. The SSE 15 incorporates flying points on the top and bottom for the utilization of the Peavey VersaMount 70 mounting bracket.

The SSE 15 is constructed with a special grade of high density 13 mm birch plywood and covered with a durable acrylic polyurethane. This finish makes the enclosure presentable in any application. The SSE 15 is available in black, white or a

natural wood finish for staining or painting. The SSE 15 is engineered for public address and a wide range of musical applications.

### Features:

- Two-way sound reinforcement enclosure
- Designed for permanent install
- Full-range, wide-band production from 74 Hz to 17 kHz
- Available in three finishes: black, white or natural
- Peavey Scorpion® Pro 1500+ 15" woofer with 2.5" (64 mm) voice coil
- Peavey 14XT™ titanium diaphragm compression driver
- Sound Guard™ IV tweeter protection network
- Seven flying points (six 3/8" for suspension and one 1/4" for angle adjustment)

- Mounting point for VersaMount™ 70 bracket
- 13 mm birch plywood construction

### Frequency response, 1 meter on-axis, swept-sine in anechoic environment:

74 Hz to 17 kHz (±3 dB)

Usable low frequency limit (-10 dB point):

54 Hz

### Power handling:

Full range:  
500 Watts program  
1,000 Watts peak

### Sound pressure level, 1 Watt, 1 meter in anechoic environment:

Full range:  
98 dB SPL (2.83 V input)





## SANCTUARY SERIES™

### Maximum sound pressure level (1 meter):

Full range:  
122 dB SPL continuous  
128 dB SPL peak

### Radiation angle measured at -6 dB point of polar response:

500 Hz to 1.6 kHz:  
Horiz.  $90^\circ \pm 20^\circ$   
Vert.  $95^\circ \pm 30^\circ$   
1.6 kHz to 5 kHz:  
Horiz.  $70^\circ \pm 20^\circ$   
Vert.  $60^\circ \pm 35^\circ$   
5 kHz to 16 kHz:  
Horiz.  $90^\circ \pm 15^\circ$   
Vert.  $40^\circ \pm 10^\circ$

### Directivity factor, Q (Mean):

10.86  $\pm$  6.7

### Directivity index, Di (Mean):

9.57 dB  $\pm$  2.6 dB

### Transducer complement:

Low frequency section:  
Peavey Scorpion® Pro 1500+ woofer  
with 2.5" (64 mm) voice coil  
High frequency section:  
Peavey 14XT™ titanium diaphragm  
compression driver on a  $90^\circ \times 40^\circ$   
constant directivity horn

### Box tuning frequency:

Low frequency section:  
74 Hz

### Harmonic distortion:

1% rated power  
Second harmonic:  
100 Hz: 2.81%  
1 kHz: 0.13%  
Third harmonic:  
100 Hz: 1.0%  
1 kHz: 0.18%  
10% rated power  
Second harmonic:  
100 Hz: 8.91%  
1 kHz: 0.56%  
Third harmonic:  
100 Hz: 5.62%  
1 kHz: 0.32%

### Electro-acoustic crossover frequency (internal passive):

2.8 kHz

### Impedance (Z):

Full range:  
Nominal: 8  $\Omega$   
Minimum: 5.4  $\Omega$

### Input Connection:

One (1) four-pin Neutrik® Speakon® in  
parallel with one (1) two-position terminal  
strip

### Enclosure materials and finish:

Trapezoidal, dado-joined 13 mm birch

finished with a textured acrylic  
polyurethane. Also includes a full-length  
metal grille covered with acoustical  
grade grille cloth. Available in black,  
white or natural finishes.

### Mounting provisions:

- (6) 3/8"-16 threaded mounting  
suspension points (three each top and  
one each side and back). Use only  
forged shoulder machinery eye bolt,  
Mil Spec MIL51937-3.  
(1) 1/4"-20 threaded mounting point  
on back bottom for angle adjustments.  
(4) 1/4"-20 threaded mounting points  
on bottom to accommodate use of  
Versamount™ 70 adjustable mounting  
bracket.  
**DO NOT suspend this unit upside down  
using VersaMount™ system.**

### Dimensions (H x W x D):

Front:  
27" x 18" x 17.75"  
686 mm x 467 mm x 451 mm  
Rear:  
27" x 12.14" x 17.75"  
686 mm x 308 mm x 451 mm

### Net Weight:

46 lbs. (20.9 kg)

### Frequency response

This measurement is useful in determining  
how accurately a given unit reproduces an  
input signal. The frequency response of  
the SSE 15 is measured at a distance of 1  
meter using a 1 Watt (into the nominal  
impedance) swept-sine input signal. As  
shown in figure 1, the selected drivers in  
the SSE 15 combine to give a smooth  
frequency response from 74 Hz to 17 kHz.

### Directivity

Beamwidth is derived from the -6 dB  
points from the polar plots (see figure 3)  
which are measured in a whole-space  
anechoic environment. Q and Directivity  
Index are plotted for the on-axis  
measurement position. These are  
specifications that provide a reference to  
the coverage characteristics of the unit.  
These parameters provide insight for  
proper placement and installation in the  
chosen environment. The blending of the  
components of the SSE 15 exhibit a  
desirable beamwidth and directivity  
(figures 3 & 4) suitable for sound  
reinforcement applications.

### Power handling

There are many different approaches to  
power handling ratings. Peavey rates this

loudspeaker system's power handling  
using a full-range form of the AES  
Standard 2-1984. Using audio band 20 Hz  
to 20 kHz pink noise with peaks of four  
times the RMS level, this strenuous test  
signal assures the user that every portion  
of this system can withstand today's high  
technology music. This rating is contingent  
upon having a minimum of 3 dB of  
amplifier headroom available.

### Harmonic distortion

Second and third harmonic distortions vs.  
frequency are plotted in figures 5 & 6 for  
two power levels. Ten percent (10%) of  
rated input power and either one percent  
(1%) of rated input power or 1 Watt,  
whichever is greater. Distortion is read  
from the graph as the difference between  
the fundamental signal (frequency  
response) and the desired harmonic. As an  
example, a distortion curve that is down  
40 dB from the fundamental is equivalent  
to 1% distortion.

### Mounting

**Caution:** Before attempting to suspend or  
mount this speaker, consult a certified  
structural engineer. The speaker may fall  
due to improper installation, resulting in  
serious injury and property damage. DO  
NOT suspend or mount any other product  
or device from this enclosure. Maximum  
enclosure angle  $45^\circ$ . Use only Grade 5  
hardware or better. All associated rigging  
is the responsibility of others.

### Architectural and Engineering Specifications

The loudspeaker system shall have an  
operating bandwidth of 74 Hz to 17 kHz.  
The nominal output level shall be 98 dB  
when measured at a distance of one meter  
with an input of one Watt. The nominal  
impedance shall be 8 Ohms. The maximum  
program power handling shall be 500  
Watts with a peak power input of at least  
1000 Watts and a minimum amplifier  
headroom of 3 dB. The nominal radiation  
geometry shall be  $90^\circ$  in the horizontal  
plane and  $40^\circ$  in the vertical plane. The  
outside dimensions shall be 27" high by  
18" wide by 17.75" deep. The weight shall  
be 46 lbs. The loudspeaker system shall  
be a SSE 15 model.

### 3 + 2 YEAR LIMITED WARRANTY

**NOTE:** For details, refer to the  
warranty statement. Copies of  
this statement may be obtained  
by contacting Peavey Electronics  
Corporation, P.O. Box 2898, Meridian,  
Mississippi 39301-2898.

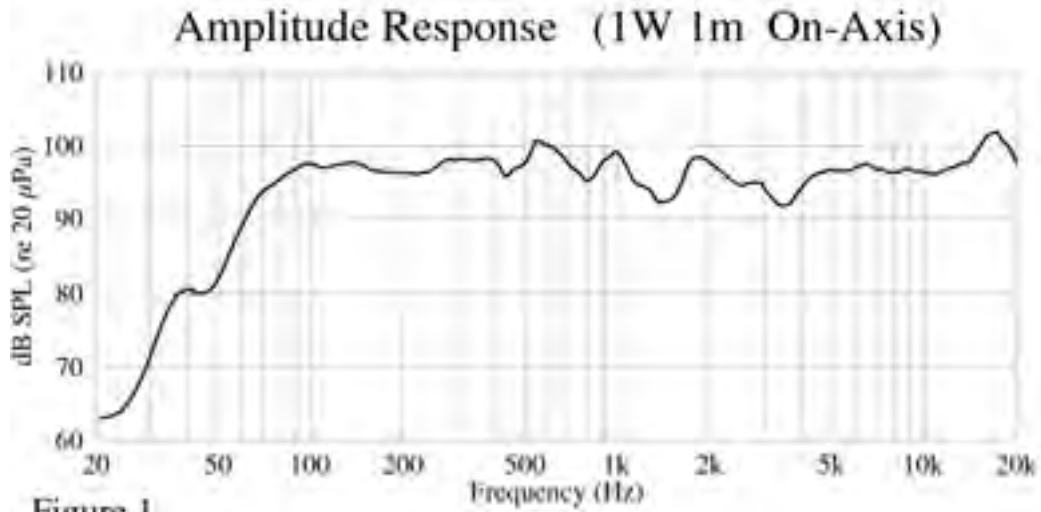


Figure 1

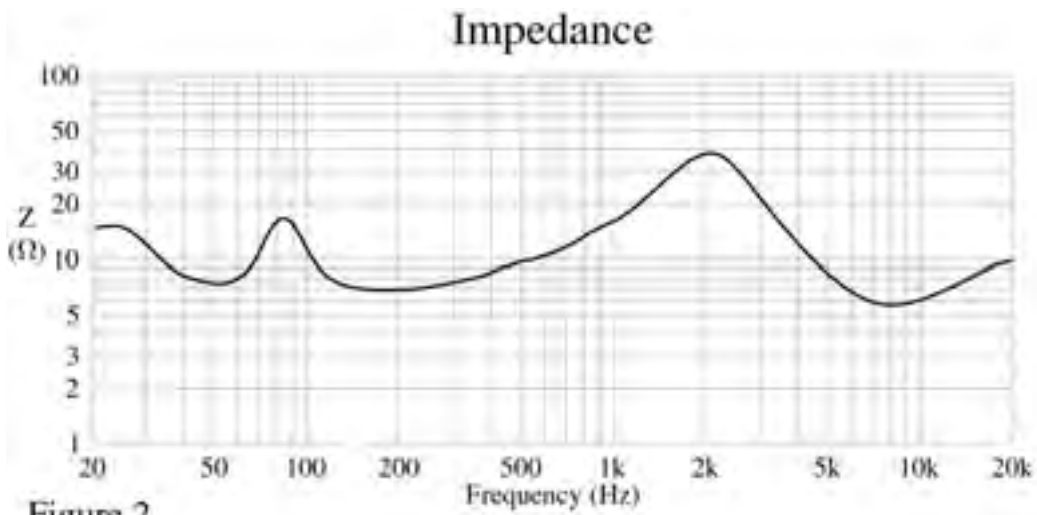


Figure 2

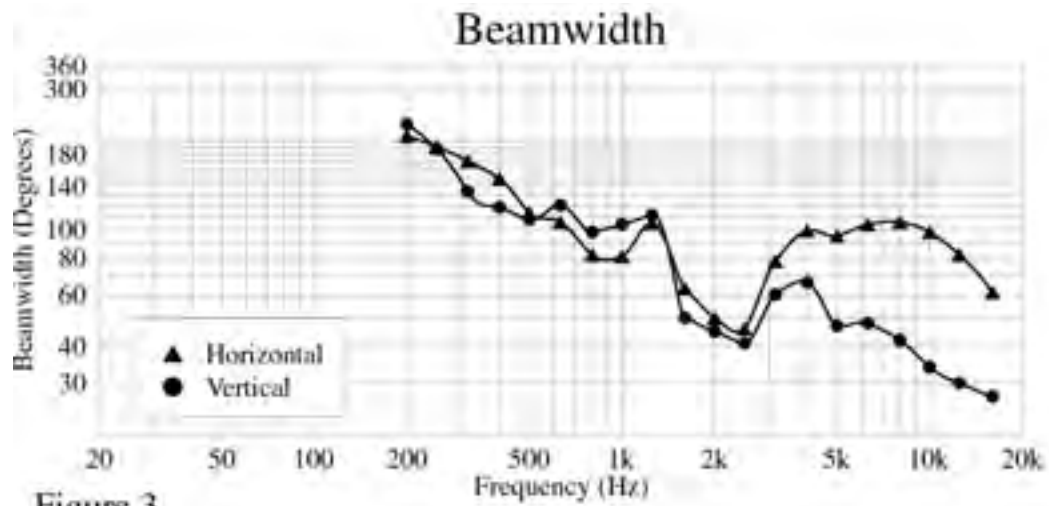


Figure 3

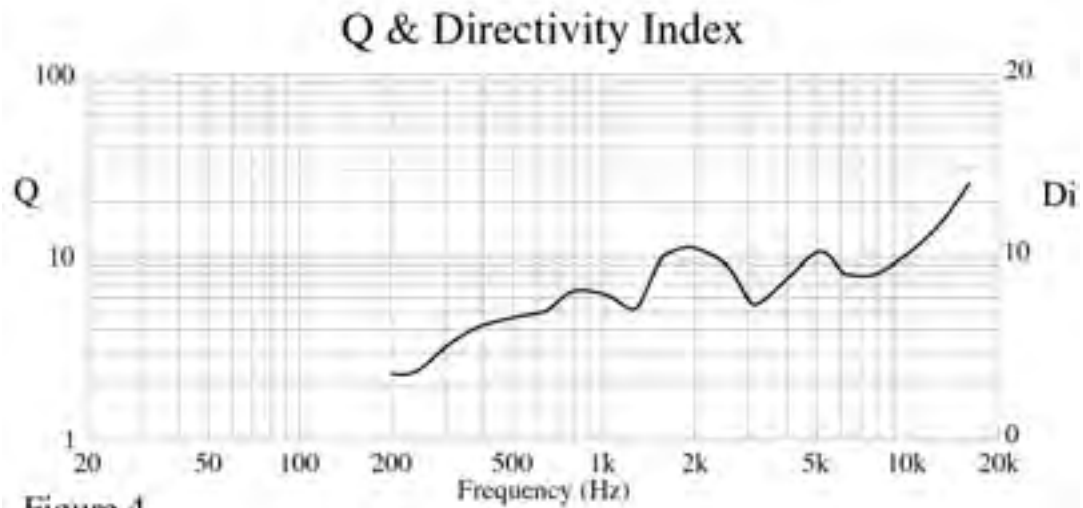


Figure 4

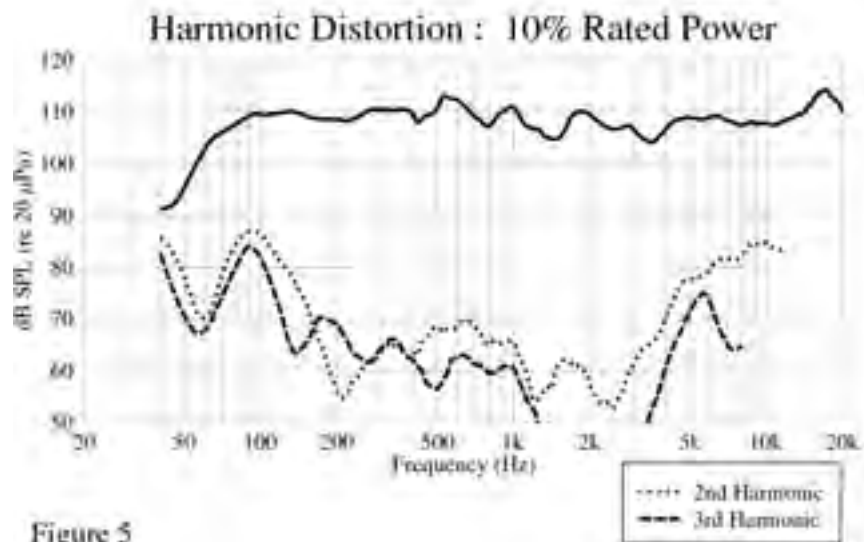


Figure 5

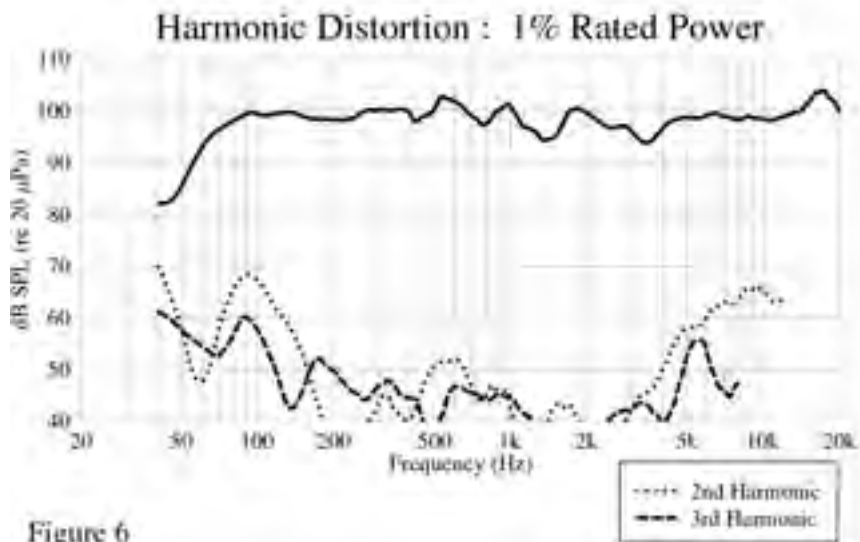
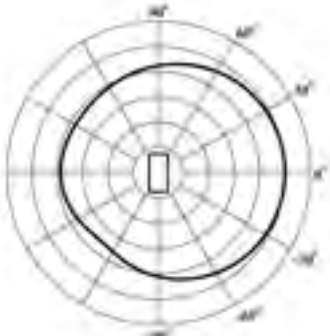


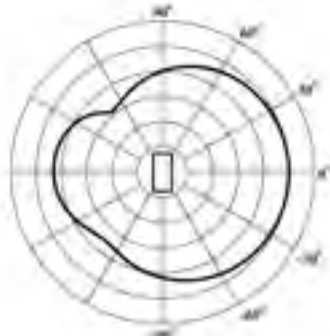
Figure 6



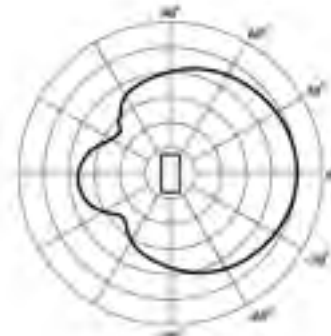
**Vertical Polar Patterns 6 dB per Division**



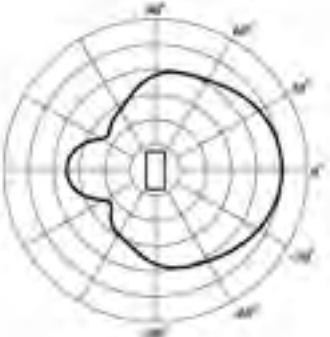
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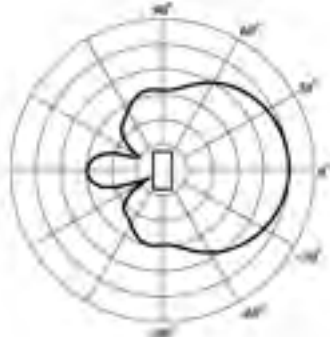
250 Hz



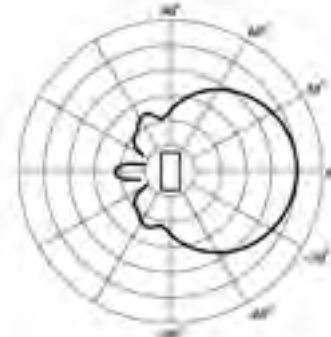
315 Hz



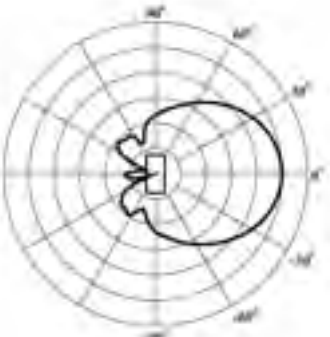
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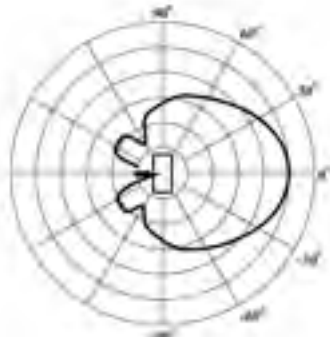
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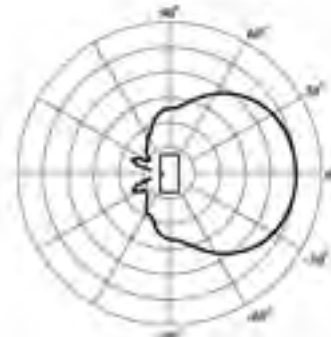
630 Hz



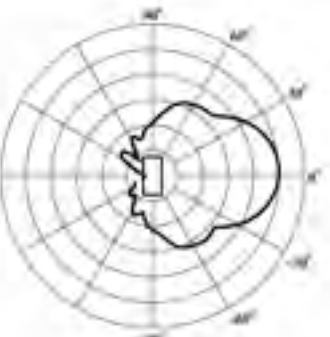
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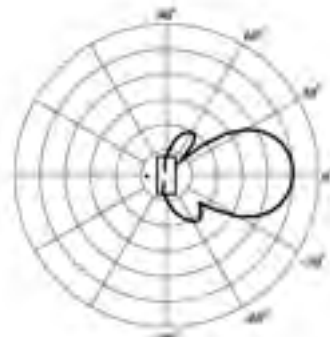
1 kHz



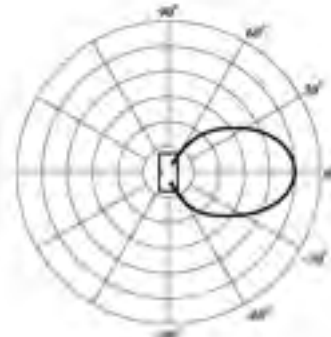
1.25 kHz



1.6 kHz



2 kHz



2.5 kHz

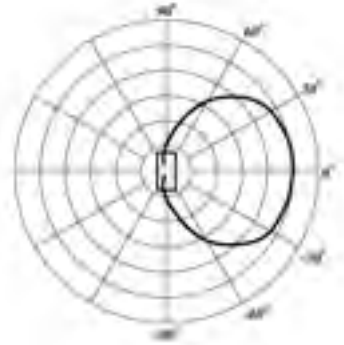
**Vertical Polar Patterns 6 dB per Division**



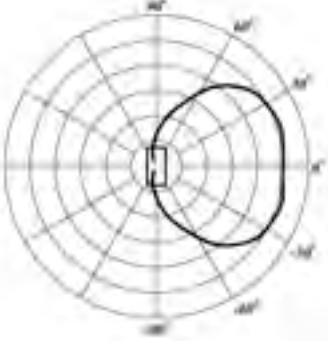
3.15 kHz



4 kHz



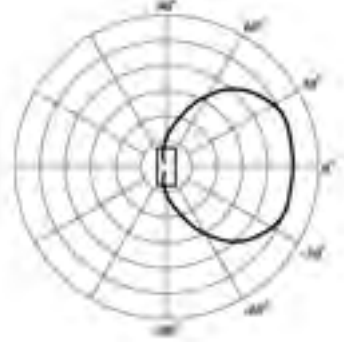
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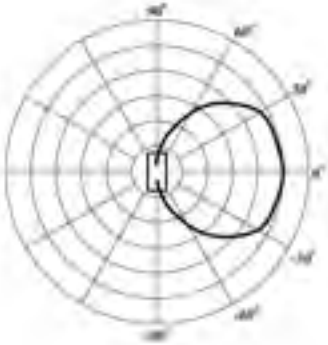
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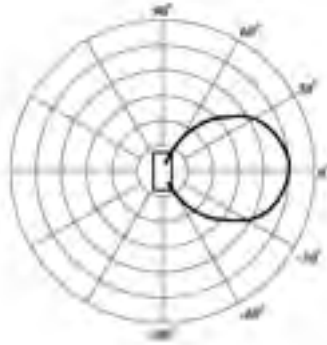
8 kHz



10 kHz



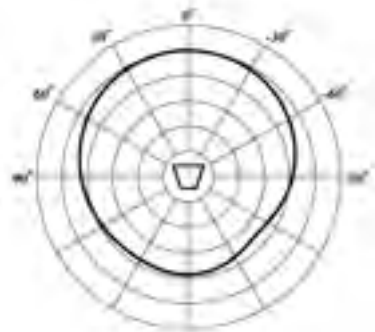
12.5 kHz



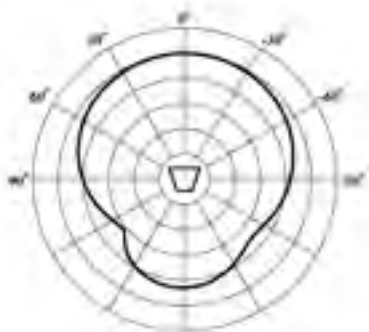
16 kHz



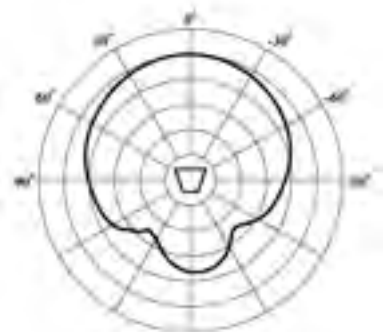
**Horizontal Polar Patterns 6 dB per Division**



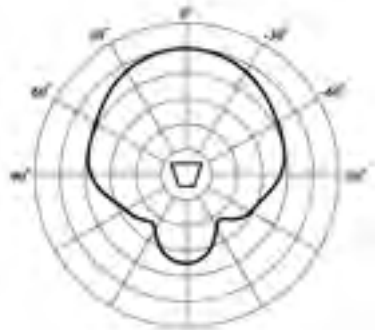
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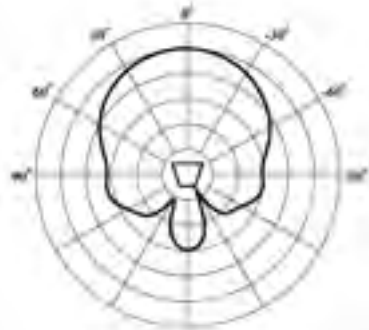
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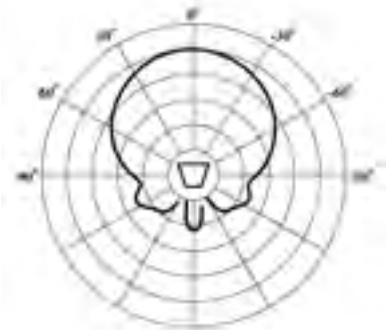
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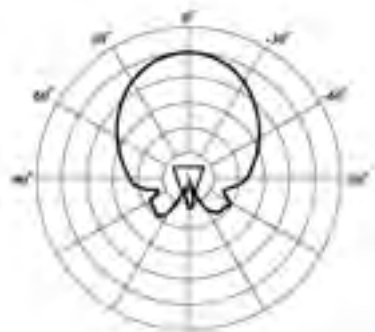
400 Hz



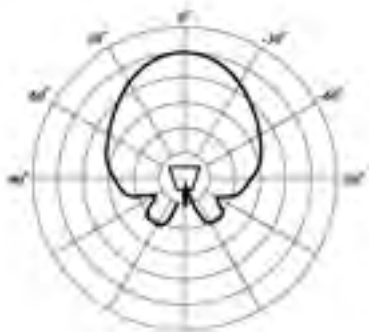
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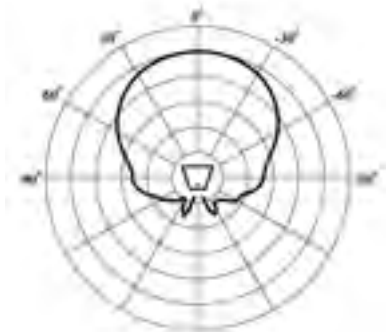
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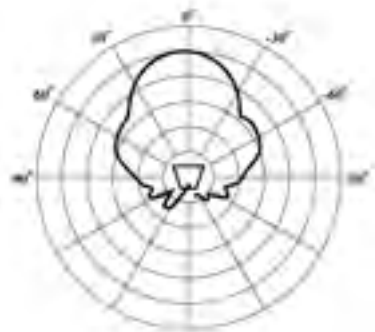
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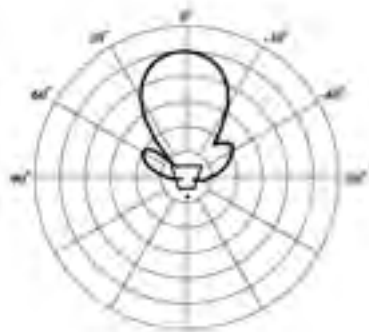
1 kHz



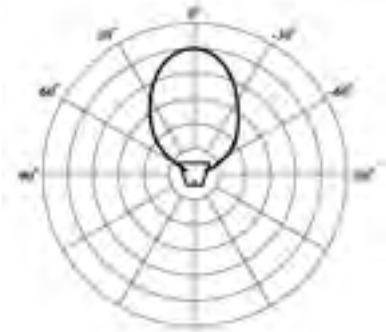
1.25 kHz



1.6 kHz



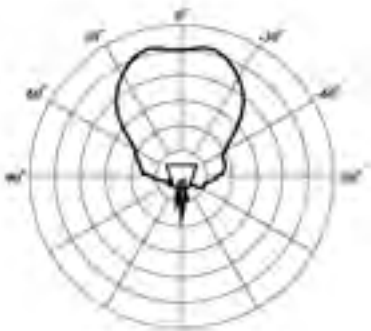
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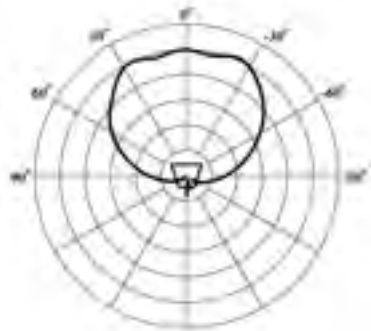
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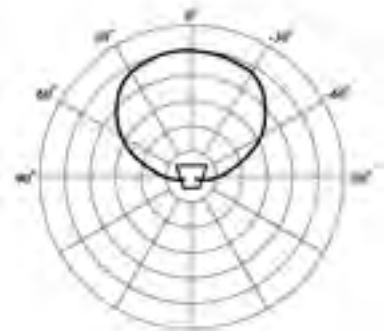
**Horizontal Polar Patterns 6 dB per Division**



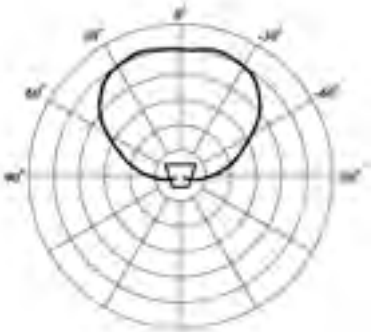
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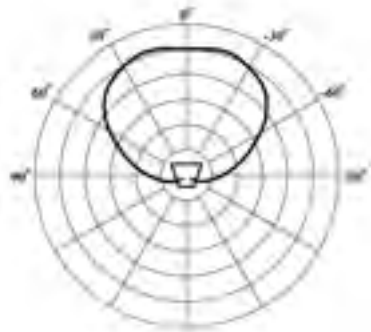
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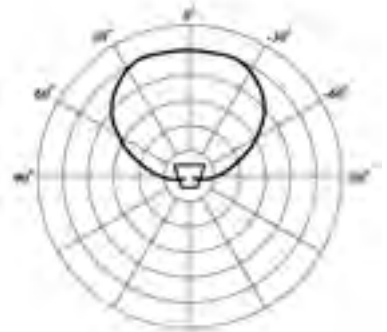
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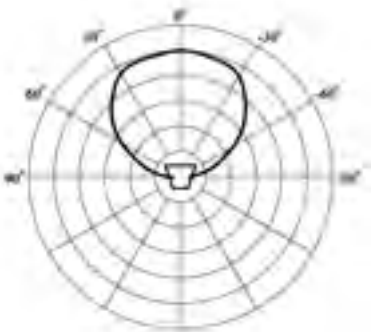
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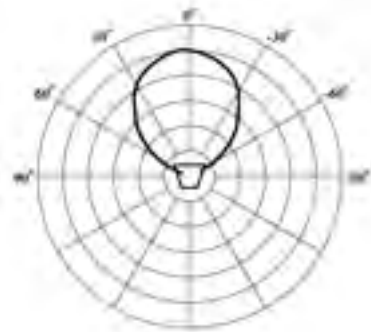
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10 kHz



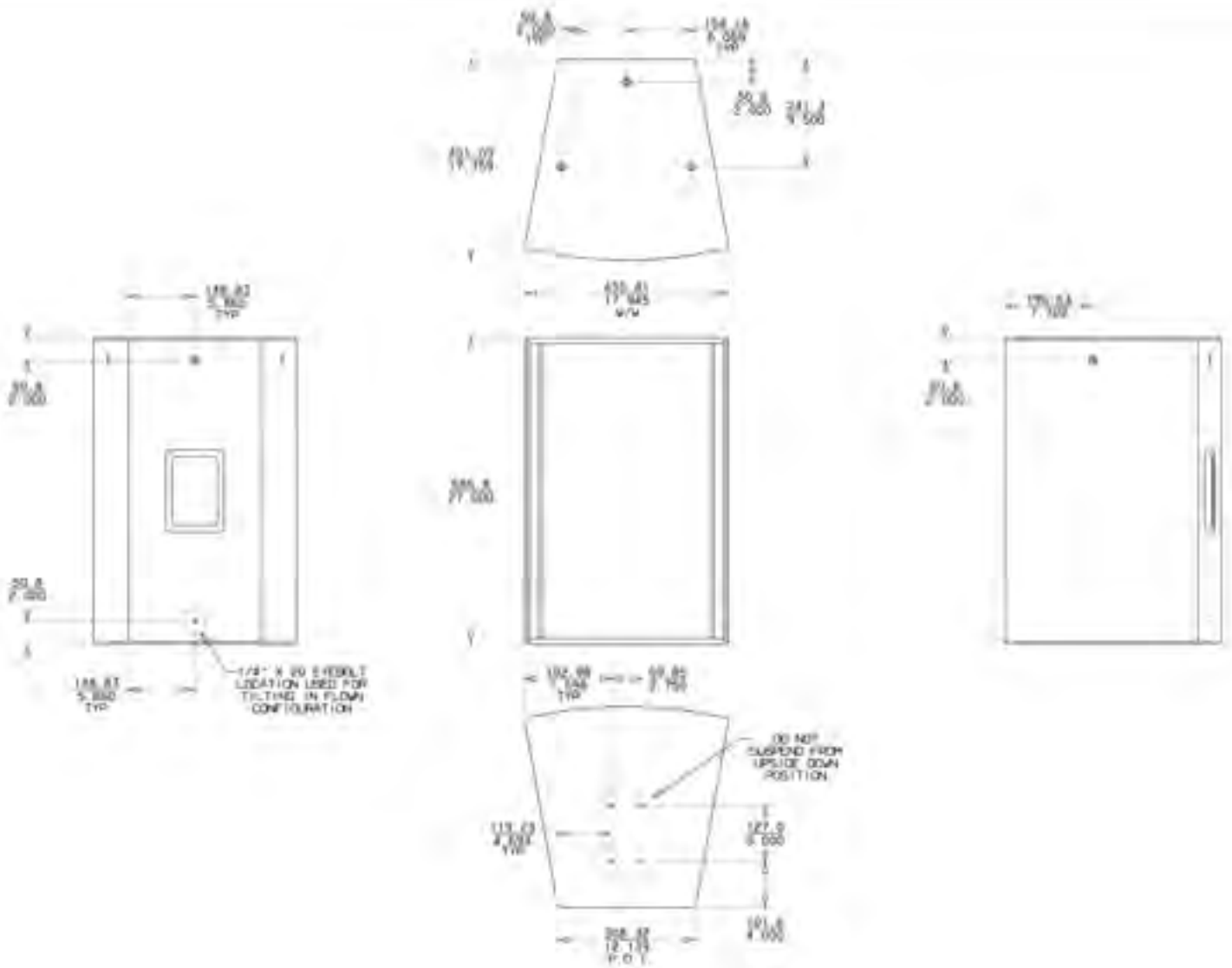
12.5 kHz



16 kHz



# SANCTUARY SERIES™



**Input Plate**

**SANCTUARY SERIES™**  
sanctuary-series.com

**SSE 15**  
DESIGNED AND  
MADE IN USA

IMPEDANCE:  
**8 OHMS**

WEIGHT:  
**46 lbs./21 kg**

MAX POWER:  
**500W PROGRAM**

**PIN 1 + (+) POS.**  
**PIN 1 - (-) NEG.**

**HF DRIVER PROTECTED BY SOUNDGUARD™ IV**  
A PRODUCT OF PEAVEY ELECTRONICS

**8Ω**  **CE**

**+ -**  
**FULL RANGE INPUTS**

**DANGER:** BEFORE ATTEMPTING TO SUSPEND THIS SPEAKER CONSULT A CERTIFIED STRUCTURAL ENGINEER. SPEAKER CAN FALL FROM IMPROPER SUSPENSION, RESULTING IN SERIOUS INJURY AND PROPERTY DAMAGE. DO NOT SUSPEND OR MOUNT ANY OTHER PRODUCT OR DEVICE FROM THIS ENCLOSURE! USE ONLY GRADE 5 HARDWARE OR BETTER.

**WARNING:** THIS SPEAKER SYSTEM CAN PERMANENTLY DAMAGE HEARING! USE EXTREME CARE SETTING MAXIMUM LOUDNESS.



[www.sanctuary-series.com](http://www.sanctuary-series.com)

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Features and specifications subject to change without notice.