The SSE is a new enclosure series featuring high power ratings with custom components, a sleek look and a unique, snap-in metal grille. The SSE 10 is a two-way system featuring the highly acclaimed Peavey 14XT titanium compression driver with the diverse Sound Guard IV tweeter protection network and a maximum-performance 10” woofer for a smooth response. The SSE 10 is rated at 400 Watts program and 800 Watts peak. This lightweight speaker system is ideal for smaller venues where space is at a premium. Connections are made using a four-pin Neutrik® Speakon® or paralleled two-position terminal block for additional cabinets. The SSE 10 incorporates flying points on the top of the unit and mounting points on the bottom for utilizing the Peavey VersaMount™ 70 mounting bracket. The SSE series is available in black, white and natural finishes.

Features:
- Two-way sound reinforcement enclosure
- Designed for permanent install
- Available in three finishes: black, white or natural
- Premium 10” woofer
- Peavey 14XT™ titanium 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
- 400 Watts program/800 Watts peak power handling
- 80 Hz to 17 kHz
- 95 dB at 1W/1m
- 8 Ohms

Frequency response, 1 meter on-axis, swept-sine in anechoic environment:
- 80 Hz to 17 kHz (±3 dB)

Usable low frequency limit (-10 dB point):
- 60 Hz

Power handling:
- Full range:
  - 400 W program
  - 800 W peak

Sound pressure level, 1 Watt, 1 meter in anechoic environment:
- Full range:
  - 95 dB SPL 2.83 V input

Maximum sound pressure level (1 meter):
- Full range:
  - 118 dB SPL continuous
  - 124 dB SPL peak
Radiation angle measured at 6 dB point of polar response:
500 Hz to 1.6 kHz:
Horiz. 125° ± 25°
Vert. 130° ± 15°
1.6 kHz to 5 kHz:
Horiz. 105° ± 20°
Vert. 75° ± 30°
5 kHz to 16 kHz:
Horiz. 95° ± 25°
Vert. 65° ± 10°

Directivity index, Di (Mean):
7.19 ± 6.07

Directivity index, Q (Mean):
8.09 dB ± 2.01 dB

Transducer complement:
Input Connection:
(Internal passive):
Electro-acoustic crossover frequency
Directivity index, Q (Mean):
7.19 ± 6.07

Dimensions (H x W x D):
Front: 19.63" x 15.09" x 12.12"
Rear: 19.63" x 11.09" x 12.12"

Net Weight:
29 lbs. (13.2 kg)

Frequency response
This measurement is useful in determining how accurately a given unit reproduces an input signal. The frequency response of the SSE 10 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 10 combine to give a smooth frequency response from 80 Hz to 17 kHz.

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 specifications provide a reference to the coverage characteristics of the unit and provide insight into proper placement and installation in the chosen environment. The blending of the components of the SSE 10 exhibit a desirable beamwidth and directivity (figures 3 and 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 and 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. The maximum enclosure angle is 45°. 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 80 Hz to 17 kHz. The nominal output level shall be 95 dB when measured at a distance of a meter with an input of 1 Watt. The nominal impedance shall be 8 Ohms. The maximum program power handling shall be 400 Watts with a peak power input of at least 800 Watts and a minimum amplifier headroom of 3 dB. The nominal radiation geometry shall be 90° in the horizontal plane and 60° in the vertical plane. The outside dimensions shall be 19.63” high by 15.09” wide by 12.12” deep. The weight shall be 29 lbs. The loudspeaker system shall be a model SSE 10.

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.

Electro-acoustic crossover frequency (internal passive):
2.1 kHz
Impedance (Z):
Full range:
Nominal: 8 Ω
Minimum: 6 Ω

Input Connection:
1 four-pin Neutrik® Speakon® in parallel with a two-position terminal strip

Enclosure materials and finish:
Trapezoidal, dado-joined, 12 mm 9-ply Birch finished with a textured acrylic polyurethane, with 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 MIL53937-3.
(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.
(4) 1/4”-20 threaded mounting points.

Dimensions (H x W x D):
Front: 19.63” x 15.09” x 12.12”
Rear: 19.63” x 11.09” x 12.12”

Harmonic distortion:
1% rated power
Second harmonic:
100 Hz: 0.43%
1 kHz: 0.07%
Third harmonic:
100 Hz: 0.58%
1 kHz: 1.02%
10% rated power
Second harmonic:
100 Hz: 2.28%
1 kHz: 0.40%
Third harmonic:
100 Hz: 0.97%
1 kHz: 2.02%
Amplitude Response (1W 1m On-Axis)

Figure 1

Impedance

Figure 2

Beamwidth

Figure 3

Q & Directivity Index

Figure 4
Harmonic Distortion: 10% Rated Power

Figure 5

Harmonic Distortion: 1% Rated Power

Figure 6
Vertical Polar Patterns 6 dB per Division

50 Hz
63 Hz
80 Hz
100 Hz
125 Hz
160 Hz
200 Hz
250 Hz
315 Hz
400 Hz
500 Hz
630 Hz
Vertical Polar Patterns 6 dB per Division

800 Hz

1 kHz

1.25 kHz

1.6 kHz

2 kHz

2.5 kHz

3.15 kHz

4 kHz

5 kHz

6.3 kHz

8 kHz

10 kHz
Vertical Polar Patterns 6 dB per Division

12.5 kHz

16 kHz
Horizontal Polar Patterns 6 dB per Division

50 Hz

63 Hz

80 Hz

100 Hz

125 Hz

160 Hz

200 Hz

250 Hz

315 Hz

400 Hz

500 Hz

630 Hz
Horizontal Polar Patterns 6 dB per Division

800 Hz

1 kHz

1.25 kHz

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8 kHz

10 kHz
Horizontal Polar Patterns 6 dB per Division

12.5 kHz

16 kHz
SPECIFICATIONS
SSE™ 10

Input Plate

SANCTUARY SERIES™
sanctuary-series.com
SSE 10
DESIGNED AND MADE IN USA

IMPEDANCE: 8 OHMS
WEIGHT: 29 lbs./13 kg
MAX POWER: 400W PROGRAM

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

8Ω + -
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.