

SP E A V E Y E L E C T R O N I C S

SP™ 5X

SPECIFICATIONS

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

68 Hz to 16 kHz (± 3 dB)

Usable low frequency limit (-10 dB point):

52 Hz

Power handling:

Full Range:

350 W continuous

700 W program

1,400 W peak

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

Full Range:

99.0 dB SPL, (2.83 V input)

Maximum sound pressure level (1 meter):

Full Range:

124 dB SPL continuous

132 dB SPL peak

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

90 degrees horizontal by 45 degrees vertical

Transducer complement:

Low Frequency Section:

1x 15 in.

SP-15825 Scorpion® Plus woofer

High Frequency Section:

1x .875 in. exit/51mm voice coil

RX™22 compression driver on a CD horn

Box tuning frequency:

Low Frequency Section:

51 Hz

Crossover frequency (internal passive):

Low Frequency - High Frequency:

1,800 Hz



Impedance (Z):

Full Range:

Nominal: 8.0 Ω

Minimum: 6.7 Ω

Input Connections:

2x 1/4" phone jack

Enclosure materials and finish:

3/4" novaply finished in black carpet

Mounting provisions:

This unit is not designed for overhead suspension.

SA-1 stand mount adaptor built-in, and four large rubber feet on bottom for floor use.

Dimensions (H x W x D):

Front:

28.00 in. x 18.94 in. x 18.31 in.

711 mm x 481 mm x 465 mm

Rear:

28.00 in. x 13.00 in. x 18.31 in.

711 mm x 330 mm x 465 mm

Net Weight:

70 lbs. (31.8 kg)

Features:

- 15" Scorpion Plus woofer with field-replaceable basket
- RX™22 compression driver with ferrofluid cooling
- 700 W program, 1400 W peak
- Sound Guard™ III tweeter protection
- Trapezoidal enclosure
- Stand mount adaptor

Description

The latest version of the SP 5 has the new RX22 high frequency compression driver incorporated, as well as a very nice looking cabinet design. The SP 5X is a two-way speaker system comprised of a 15" Scorpion Plus woofer with a Kevlar® impregnated cone, and an RX 22 compression driver loaded onto a CH®3 constant directivity horn.



The SP™ 5X has a trapezoidal shaped enclosure, which reduces the build-up of standing waves inside the enclosure, which minimizes mid-bass and mid-range colorations due to the cabinet. It is constructed of 1/4" high density particle board and is covered with a durable black carpet. The enclosure corners are reinforced with polymer caps, and a black powder-coated expanded metal grille covers the lower half of the system to protect the woofer from external damage. An SA-1 stand mount adaptor is built-in for ease of speaker stand use.

The two-way system is comprised of a 15" Scorpion® Plus woofer with a Kevlar® impregnated cone and a highly linear suspension. The high frequencies are handled by an RX™22 two-inch titanium diaphragm compression driver utilizing ferrofluid cooling, coupled to a CH®3 constant directivity horn. This horn has a smooth, even response with good high frequency dispersion. The RX 22 driver features the Radialinear Planar Phase Correction System, under US Patent 6,064,745, which provides smoother and extended high frequency response.

Input connection to the system is made via two 1/4" phone jacks in parallel. The internal passive crossover features Sound Guard™ III tweeter protection circuit, an advanced topology crossover with high performance components, to provide high power handling and reliability. Peavey's proprietary high-frequency driver protection circuitry, Sound Guard, provides long and medium term driver overload protection when the system is used full-range, without impairing musical transients or dynamics. The crossover provides driver roll-off and protection, as well as driver EQ for the woofer and horn, the sum total is a clean, clear and smooth response. High-quality, reliable crossover components include polypropylene capacitors, and high current inductors. The optimal integration of the crossover with the selected drivers results in a smooth frequency response from 68 Hz to 16 kHz.

Despite its compact dimensions for a 15" based enclosure, this system can put out some very serious sound levels, and take 700 Watts program of clean amplifier power, resulting in clean coverage with excellent clarity.

Frequency response

This measurement is useful in determining how accurately a given unit reproduces an input signal. The frequency response of the SP 5X 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 SP 5X combine to give a smooth frequency response from 68 Hz to 16 kHz.

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.

Mounting

▲ This unit is not designed for overhead suspension.

Architectural and Engineering Specifications

The loudspeaker system shall have an operating bandwidth of 68 Hz to 16 kHz. The nominal output level shall be 99.0 dB when measured at a distance of one meter with an input of one Watt. The nominal impedance shall be 8.0 Ohms. The maximum continuous power handling shall be 350 Watts, maximum program power of 700 Watts and a peak power input of at least 1,400 Watts, with a minimum amplifier headroom of 3 dB. The nominal radiation geometry shall be 90 degrees in the horizontal plane and 45 degrees in the vertical plane. The outside dimensions shall be 28.00 inches high by 18.94 inches wide by 18.31 inches deep. The weight shall be 70 pounds. The loudspeaker system shall be a Peavey model SP 5X.

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.

Amplitude Response (1W 1m On-Axis)

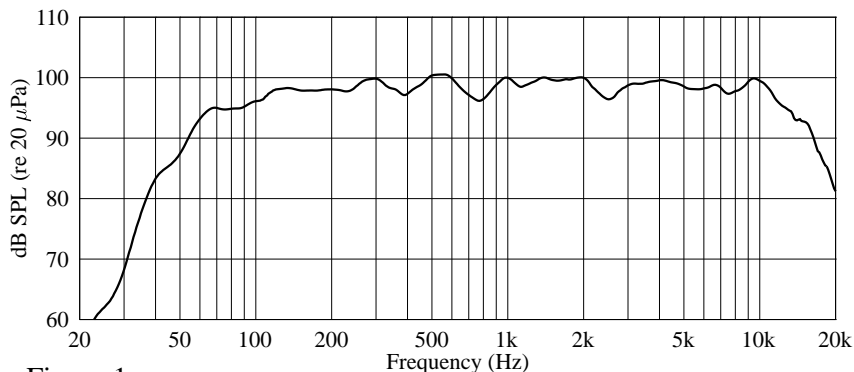


Figure 1

Impedance

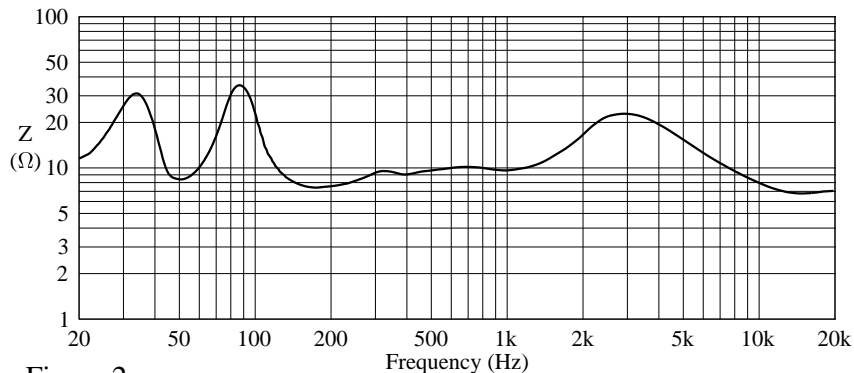


Figure 2

SP™ 5X INPUT

SP™ 5X



MAX POWER: 700W PROGRAM

IMPEDANCE: 8 OHMS

WEIGHT: 69 LBS. 31.4 kg.

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



FULL RANGE INPUTS
IN PARALLEL

HF DRIVER PROTECTED BY SOUNDGUARD™ III
BUILT UNDER U.S. PATENT NO. 6,064,745



Features and specifications subject to change without notice.

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