

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

SP™ 6X

SPECIFICATIONS

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

70 Hz - 17 kHz (± 3 dB)

Usable low frequency limit (-10 dB point):

55 Hz

Power handling:

Full Range:

250 W continuous

500 W program

1000 W peak

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

Full Range:

97.0 dB SPL, (2.83 V input)

Maximum sound pressure level (1 meter):

Full Range:

121.0 dB SPL continuous

127.0 dB SPL peak

Transducer complement:

Low Frequency Section:

1x 12 in woofer, vented
SH12862

High Frequency Section:

1x .875 in. exit/50 mm RX™ 22 voice coil compression driver on CH® 3 horn with Sound Guard™ III

Box tuning frequency:

Low Frequency Section:

51 Hz

Crossover frequency (internal passive):

Low Frequency - High Frequency:

2.9 kHz

Impedance (Z):

Full Range:

Nominal: 8.0 Ω

Minimum: 6.1 Ω

Input connections:

2x 1/4 inch phone jacks



Enclosure materials and finish:

3/4" novaply covered with a durable wear resistant black carpet

Mounting provisions:

This unit is not designed for overhead suspension.

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:

67 lbs. (30.5 kg)

Features:

- SH 12862 12" Sheffield® woofer
- RX22 compression driver
- CH® 3 constant directivity horn
- Sound Guard™ III high-frequency protection circuit
- SA-1™ stand adaptor

Description:

The latest version of the SP 6X has the new RX22 high frequency compression driver incorporated, as well as a very nice looking cabinet design. The SP 6X is a two-way speaker system comprised of a 12" Sheffield® woofer and an RX 22 compression driver loaded onto a CH®3 constant directivity horn.

The SP™ 6X 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 12" Sheffield® woofer with 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 70 Hz to 17 kHz.

Despite its compact dimensions for a 12" based enclosure, this system can put out some very serious sound levels, and take 500 Watts program of clean amplifier power, resulting in clean coverage with excellent clarity.

If the bulb in your Sound Guard should ever burn out, a replacement may be obtained from an Authorized Peavey Service Center. However, if a Peavey replacement bulb is not readily available, an automotive type SK 3 clip in bulb may be substituted for temporary use until a Peavey bulb can be obtained.

Frequency Response:

This measurement is useful in determining how accurately a given unit reproduces an input signal. The frequency response of the SP™ 6X 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 6X combine to give a smooth frequency response from 70 Hz - 17 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

⚠ Caution: This unit is not designed for overhead suspension.

Architectural and Engineering Specifications

The loudspeaker system shall have an operating bandwidth of 70 Hz - 17 kHz. The nominal output level shall be 97.0 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 250 Watts, maximum program power of 500 Watts and a peak power input of at least 1000 Watts, with a minimum amplifier headroom of 3 dB. The outside dimensions shall be 28.00 inches

high by 18.94 inches wide by 18.31 inches deep. The weight shall be 67 pounds. The loudspeaker system shall be a Peavey model SP 6X.

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)

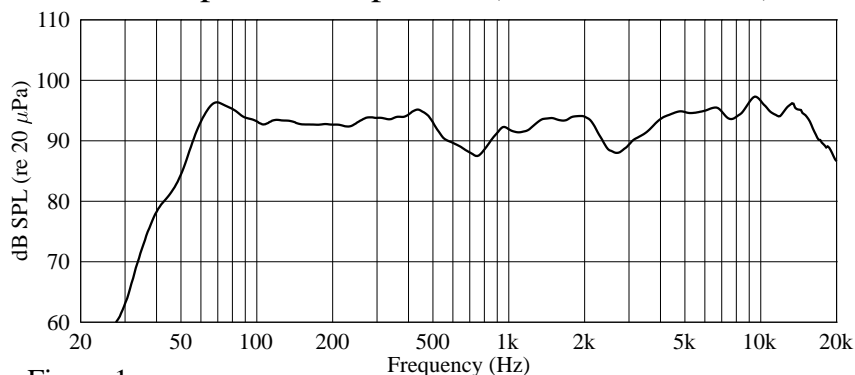


Figure 1

Impedance

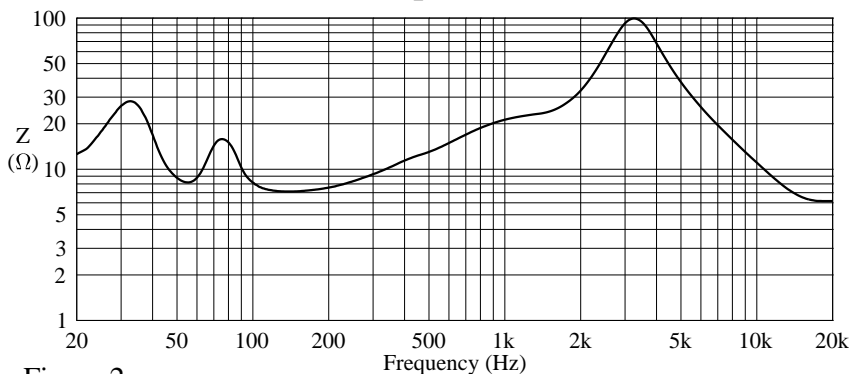


Figure 2

SP™ 6X INPUT

SP™ 6X



MAX POWER: 500W PROGRAM

IMPEDANCE: 8 OHMS

WEIGHT: 67 LBS. 30.5 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



LISTEN TO THIS™

Features and specifications subject to change without notice.

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