

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

SP™ Subcompact 18X

SPECIFICATIONS

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

52 Hz ~ 180 kHz (± 3 dB)

Usable low frequency limit
(-10 dB point):

38 Hz

Power handling:

Sub Bass Section:

500 W continuous

1,000 W program

2,000 W peak

Transducer complement:

Sub Bass Section:

1x 18 in. dual resonant enclosure

1808-8 HE BW

Box tuning frequency:

Sub Bass Section: 36 Hz & 92 Hz

Harmonic distortion:

1% rated power

2nd Harmonic:

100 Hz: 0.10%

3rd Harmonic:

100 Hz: 0.16%

10% rated power

2nd Harmonic:

100 Hz: 0.29%

3rd Harmonic:

100 Hz: 0.80%

Impedance (Z):

Sub Bass:

Nominal: 8.0 Ω

Minimum: 6.5 Ω

Input connections:

2x 1/4" jack connectors, in parallel

Enclosure materials and finish:

3/4" plywood and MDF. Finished in heavy-duty black carpet, with black protective corners and black metal grill.



Dimensions (H x W x D):

Front:

28.13 in. x 23.75 in. x 24.19 in.

714 mm x 603 mm x 614 mm

Rear:

28.13 in. x 23.75 in. x 24.19 in.

714 mm x 603 mm x 614 mm

Net weight:

102 lbs. (46.4 kg)

Additional remarks:

When used with bi-amplification, a crossover frequency of 250 Hz or below is recommended.

Features

This loudspeaker system delivers high output, low distortion bass from a small dual-resonant enclosure and internally-mounted 18" BWX woofer. It is designed for portability and includes handles, metal grill, reinforcing corners, durable carpet finish and rubber feet. A pole mount is included for mounting of a high-pass enclosure.

Description

The Subcompact 18X is a small, lightweight add-on subwoofer designed to make it easy to add more low end to the SP-X Series or other full-range speaker systems. Other uses include bass guitar and drum monitoring.

The enclosure is constructed of 7-ply high density plywood and MDF, and covered with a heavy-duty black carpet and reinforced with polymer corners. A black metal grill covers the front of the enclosure. Recessed handles on either side ease portage.

This low frequency enclosure is comprised of an 18" BWX Black Widow® woofer with Kevlar® impregnated cone, mounted in a dual-resonant chamber configuration. This design provides high output and low distortion by controlling speaker excursion and acoustically filtering out high frequencies.

Frequency response

This measurement is useful in determining how accurately a given unit reproduces an input signal. The frequency response of the SP™ Subcompact 18X is measured at a distance of 1 meter using a 1 Watt (into the nominal impedance) swept-sine input signal. The lower curve is anechoic response, while the upper curve is typical room response. As shown in figure 1, the selected drivers in the SP Subcompact 18X combine to give a smooth frequency response from 52 Hz - 180 Hz.

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 one 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.

Architectural and engineering specifications

The loudspeaker system shall have an operating bandwidth of 52 Hz - 180 Hz. The nominal output level shall be 98.0 dB when measured at a distance of one meter with an input of one Watt. The

nominal impedance shall be 8 Ohms. The maximum continuous power handling shall be 500 Watts, maximum program power of 1000 Watts and a peak power input of at least 2000 Watts, with a minimum amplifier headroom of 3 dB. The outside dimensions shall be 28.13 inches high by 23.75 inches wide by 24.19 inches deep. The weight shall be 102 pounds. The loudspeaker system shall be a Peavey model SP Subcompact 18X.

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)

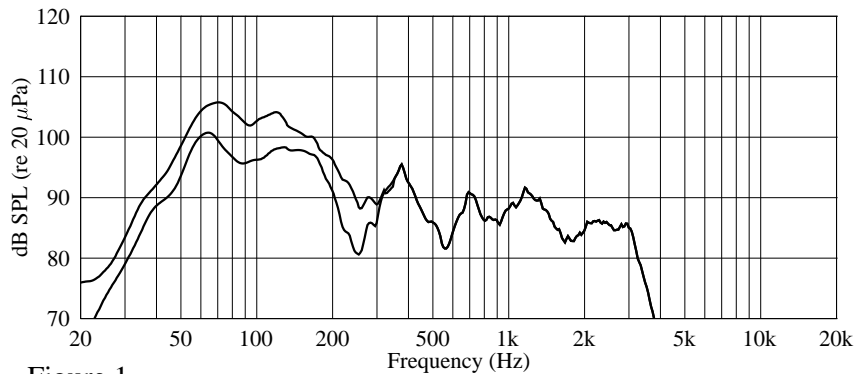


Figure 1

Impedance

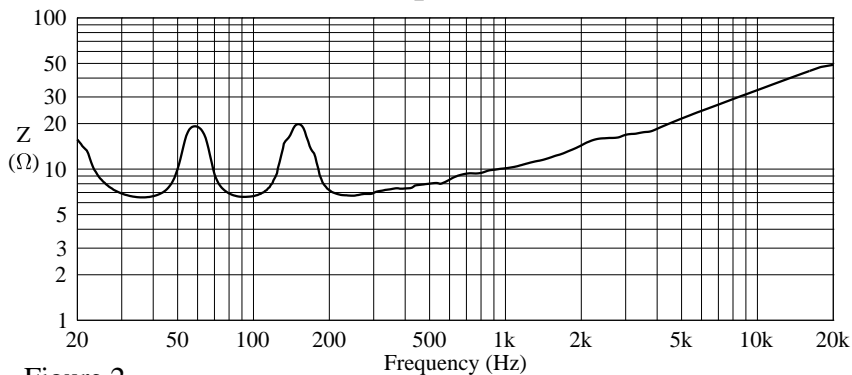
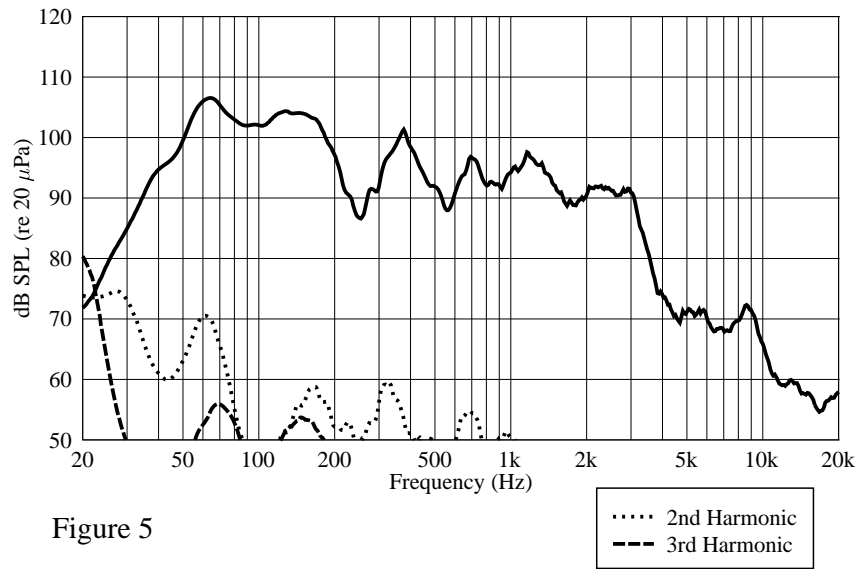
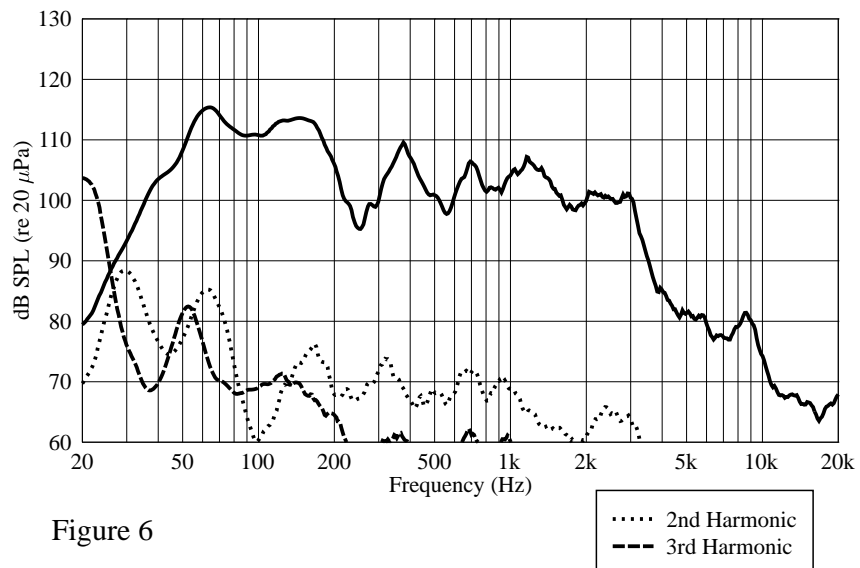


Figure 2

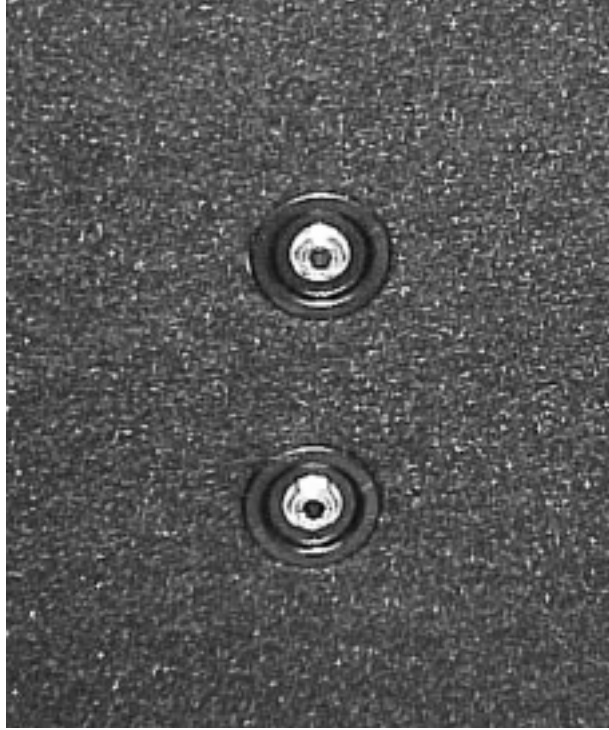
Harmonic Distortion at 1/100 Rated Power



Harmonic Distortion at 1/10 Rated Power



SP™ SUBCOMPACT 18X INPUTS



LISTEN TO THIS™

Features and specifications subject to change without notice.

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