SPECIFICATIONS SP™ 3BX



Frequency response, 1 meter on-axis, swept-sine in anechoic environment:
54 Hz to 16 kHz (±3 dB)

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

Power handling:
Full range:
600 watts continuous
1,200 watts program
2,400 watts peak

Low frequency section:
500 watts continuous
1,000 watts program
2,000 watts peak

Passive mid/high frequency section:
150 watts continuous
300 watts program
600 watts peak

Sound pressure level, 1 watt, 1 meter in anechoic environment:
Full range:
98.0 dB SPL (2.83 V input)

Low frequency section:
100 dB SPL (2.83 V input)

Mid/high frequency section:
98 dB SPL (2.83 V input)

Maximum sound pressure level (1 meter):
Full range:
126 dB SPL continuous
132 dB SPL peak

Low frequency section:
127 dB SPL continuous
133 dB SPL peak

Passive mid/high frequency section:
120 dB SPL continuous
126 dB SPL peak

Radiation angle measured at -6 dB point of polar response:
90° horizontal by 40° vertical; the vertical main polar lobe is angled down 10° with respect to straight ahead being +10, -30°

Transducer complement:
Low frequency section:
1 x 15" woofer, vented Black Widow® 1508-8 HE SF BWX

Mid frequency section:
1 x 6.5" pro midrange on an asymmetrical Quadratic Throat CD horn

High frequency section:
1 x .875" exit /51 mm voice coil RX™ 22 compression driver on an asymmetrical Quadratic Throat CD horn

Box tuning frequency:
Low frequency section: 58 Hz

Crossover frequency (internal passive):
Low frequency – mid frequency
650 Hz
Mid frequency – high frequency
2,100 Hz

Recommended active crossover frequency region and slope:
Low frequency – mid/high frequency:
700 Hz at 12 dB/octave

Time offset:
Low frequency: 0.25 ms
Mid/high frequency: 0.0 ms

Impedance (Z):
Full range:
Nominal: 8.0 Ω
Minimum: 5.2 Ω

Low frequency:
Nominal: 8.0 Ω
Minimum: 6.9 Ω

Passive MF/HF:
Nominal: 8.0 Ω
Minimum: 5.4 Ω

Input connections:
Full range: two 1/4" phone jacks, one four-pin twist lock connector & one Neutrik® NL4 Speakon® (bi-amp only)

Enclosure materials and finish:
Hardwood panel coated with Peavey's heavy-duty HammerHead™ finish.

Mounting provisions:
This unit is not designed for overhead suspension; Built-in SA-1 stand-mount adapter and four large rubber feet on bottom for floor use.

Dimensions (H x W x D):
Front:
35.44" x 20.5" x 23.96"
900.1 mm x 520.7 mm x 608.5 mm

Rear:
35.44" x 12.75" x 23.96"
900.1 mm x 323.85 mm x 608.5 mm

Net weight:
102.5 lbs. (46.5 kg)

SPECIFICATIONS SP™ 3BX

Features

- Three-way, full-range sound reinforcement system
- RX™22 compression driver with ferrofluid cooling
- 6.5" pro midrange with phase plug and ferrofluid cooling
- 15" BWX Black Widow® 4" VC woofer
- 1,200 watts program, 2,400 watts peak
- Patented Quadratic Throat CD Waveguide™ technology used on midrange and tweeter
- Asymmetrical horn aims the sound down 10° (at the audience, not over their heads)
- Sound Guard™ III tweeter and midrange protection
- Full-range inputs include a four-pin twist lock connector and two 1/4" phone jacks
- Bi-amp input via four-pin switching Neutrik® Speakon®
- Trapezoidal enclosure
- Stand-mount adapter

Description

The new SP 3BX incorporates the new Black Widow BWX SF woofer as well as two Quadratic Throat CD Waveguides. The SP 3BX is a three-way speaker system comprised of the new 15" Black Widow BWX SF series woofer with a Kevlar® -impregnated cone, a horn-loaded 6-1/4" pro midrange, and an RX 22 compression driver loaded onto a constant directivity waveguide.

The SP 3BX has a trapezoidal-shaped enclosure, which reduces the buildup of standing waves inside the enclosure to minimize mid-bass and mid-range coloration. The enclosure is constructed of a hardwood panel coated with Peavey's heavy-duty HammerHead™ UV stabilized polyurea finish for increased durability and ruggedness. A full length, wrap-around perforated steel grille protects the front of the enclosure. An SA-1 stand-mount adapter is incorporated to accommodate a speaker stand.

The three-way system consists of a 15" Black Widow BWX SF series woofer with a Kevlar-impregnated cone and dust cap. The woofer is capable of over 600 watts of continuous power handling (AES Std 2-1984). The woofer can handle a lot of sheer power. The midrange is carried by a 6-1/4" professional-grade, horn-loaded speaker with a phase plug and ferrofluid cooling, providing high articulation for vocals. The high frequencies are handled by a 2" RX 22 titanium diaphragm compression driver utilizing ferrofluid cooling. Both the midrange and the high frequency drivers are coupled to a Quadratic Throat Constant Directivity Waveguide (U.S. Patent #6,059,069) to provide smooth, even response, low distortion and good high frequency dispersion. These horns both have an asymmetrical vertical polar response, aiming the main energy lobe down 10 degrees so it is aimed at the audience instead of over their heads. This reduces ceiling reflections, ensuring greater clarity and gain before feedback. The RX 22 driver features the Radialinear Planar Phase Correction System (U.S. Patent #6,064,745), which provides a smooth and extended high frequency response.

Full-range input connection to the system is made via two 1/4" phone jacks and a four-pin twist lock connector in parallel. A four-pin Neutrik switching jack is provided for bi-amping flexibility while maintaining superior signal integrity. The internal passive crossover features the Peavey-exclusive Sound Guard protection circuit for the tweeter and the midrange speaker and an advanced topology crossover with high-performance components to provide high power handling and reliability. Sound Guard provides long- and medium-term driver overload protection without impairing musical transients or dynamics on either the midrange or the tweeter when the system is used full range or when it is bi-amped. The crossover provides driver roll-off and protection as well as driver EQ for the woofer, mid-range and horn for 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 54 Hz to 16 kHz.

Despite its compact dimensions, this system can produce very high sound levels and handle 1,200 watts program power, resulting in high articulation and long-term reliability.

Frequency response

This measurement is useful in determining how accurately a given unit reproduces an input signal. The frequency response of the SP 3BX 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 3BX combine to give a smooth frequency response from 54 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 amplifier headroom available.

Harmonic distortion

Second and third harmonic distortions vs. frequency are plotted in figures 3 & 4 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.

SPECIFICATIONS SP™ 3BX

Mounting

This unit is not designed for overhead suspension. The SA-1 stand-mount adapter may be incorporated, and four large rubber feet are included on the bottom for floor use.

Architectural & engineering specifications

The loudspeaker system shall have an operating bandwidth of 54 Hz to 16 kHz. The nominal output level shall be 98.0 dB when measured at a distance of 1 meter with an input of 1 watt. The nominal impedance shall be 8.0 ohms. The maximum continuous power handling shall be 600 watts, with maximum program power of 1,200 watts, peak power input of at least 2,400 watts and a minimum amplifier headroom of 3 dB. The nominal radiation geometry shall be 90 degrees symmetrical about the center axis in the horizontal plane, and +10, -30 degrees about the center axis in the vertical plane. The outside dimensions shall be 35.44 inches high by 20.5 inches wide by 23.96 inches deep. The weight shall be 102.5 lbs. The loudspeaker system shall be a Peavey model SP™3BX.

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.

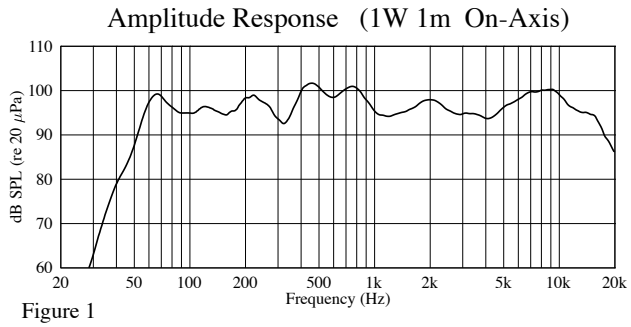


Figure 1

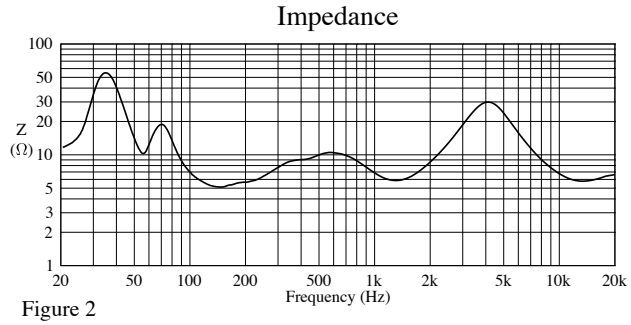


Figure 2

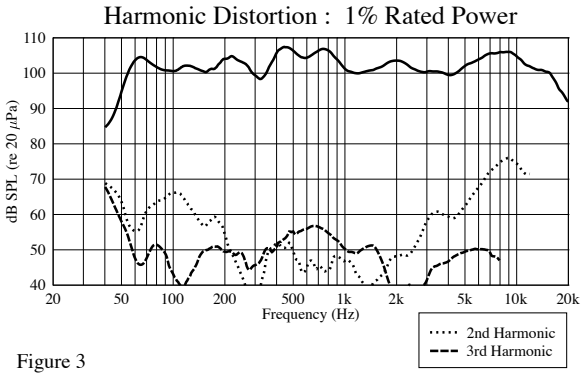


Figure 3

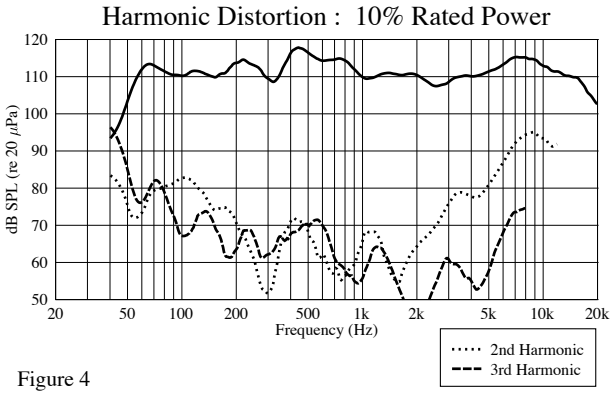


Figure 4

SP 3BX Input Plate



80305760

Features and specifications are subject to change without notice.

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PEAVEY ELECTRONICS CORPORATION LIMITED WARRANTY

Effective Date: 11/01/2011

What This Warranty Covers
Your Peavey Warranty covers defects in material and workmanship in Peavey products purchased and serviced in the U.S.A. and Canada.

What This Warranty Does Not Cover
The Warranty does not cover: (1) damage caused by accident, misuse, abuse, improper installation or operation, rental, product modification or neglect; (2) damage occurring during shipment; (3) damage caused by repair or service performed by persons not authorized by Peavey; (4) products on which the serial number has been altered, defaced or removed; (5) products not purchased from an Authorized Peavey Dealer.

Who This Warranty Protects
This Warranty protects only the original purchaser of the product.

How Long This Warranty Lasts
The Warranty begins on the date of purchase by the original retail purchaser. The duration of the Warranty is as follows:

Product Category	Duration
Guitars/Basses, Amplifiers, Preamplifiers, Mixers, Electronic Crossovers and Equalizers	2 years *(+ 3 years)
Drums	2 years *(+ 1 year)
Enclosures	3 years *(+ 2 years)
Digital Effect Devices and Keyboards and MIDI Controllers	1 years *(+ 1 year)
Microphones	2 years
Speaker Components (incl. Speakers, Baskets, Drivers, Diaphragm Replacement Kits and Passive Crossovers)	1 year
Tubes and Meters	90 Days
Cables	Limited Lifetime
AmpKit Link, Xport, Rockmaster Series, Strum'n Fun, RetroFire, GT & BT Series Amps	1 year
Marvel Jr. Guitar	90 Days

[Denotes additional Warranty period applicable if optional Warranty Registration Card is completed and returned to Peavey by original retail purchaser within 90 days of purchase.]*

What Peavey Will Do
We will repair or replace (at Peavey's discretion) products covered by Warranty at no charge for labor or materials. If the product or component must be shipped to Peavey for Warranty service, the consumer must pay initial shipping charges. If the repairs are covered by Warranty, Peavey will pay the return shipping charges.

How To Get Warranty Service
(1) Take the defective item and your sales receipt or other proof of date of purchase to your Authorized Peavey Dealer or Authorized Peavey Service Center.
OR
(2) Ship the defective item, prepaid, to Peavey Electronics Corporation, International Service Center, 412 Highway 11 & 80 East, Meridian, MS 39301. Include a detailed description of the problem, together with a copy of your sales receipt or other proof of date of purchase as evidence of Warranty coverage. Also provide a complete return address.

Limitation of Implied Warranties
ANY IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE LENGTH OF THIS WARRANTY.
Some states do not allow limitations on how long an implied Warranty lasts, so the above limitation may not apply to you.

Exclusions of Damages
PEAVEY'S LIABILITY FOR ANY DEFECTIVE PRODUCT IS LIMITED TO THE REPAIR OR REPLACEMENT OF THE PRODUCT, AT PEAVEY'S OPTION. IF WE ELECT TO REPLACE THE PRODUCT, THE REPLACEMENT MAY BE A RECONDITIONED UNIT. PEAVEY SHALL NOT BE LIABLE FOR DAMAGES BASED ON INCONVENIENCE, LOSS OF USE, LOST PROFITS, LOST SAVINGS, DAMAGE TO ANY OTHER EQUIPMENT OR OTHER ITEMS AT THE SITE OF USE, OR ANY OTHER DAMAGES WHETHER INCIDENTAL, CONSEQUENTIAL OR OTHERWISE, EVEN IF PEAVEY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.
Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you.

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

If you have any questions about this Warranty or services received or if you need assistance in locating an Authorized Service Center, please contact the Peavey International Service Center at (601) 483-5365.

Features and specifications are subject to change without notice.



Logo referenced in Directive 2002/96/EC Annex IV
(OJ(L)37/38,13.02.03 and defined in EN 50419: 2005
The bar is the symbol for marking of new waste and
is applied only to equipment manufactured after
13 August 2005

U.S. CUSTOMER WARRANTY REGISTRATION

Optional Product Extended Warranty Registration

Give us some information and put your extended warranty into effect!

Please take a few minutes to fill out this information/survey sheet to help us get to know and serve you better.

To save time, submit your warranty registration online at www.peavey.com/support/warrantyregistration

1.

First Name _____ Initial _____ Last Name _____

Street Address _____

City _____ State/Province _____ Postal Code _____

( ) _____ Telephone Number

E-mail Address _____

( ) _____ Fax Number

- - Date of birth

Gender ❒ M ❒ F

2.

Model _____ Serial # _____

Date of Purchase _____ Price Paid _____

3.

Name of store where purchased _____

City _____ State _____

4. Top two (2) reasons why you purchased from this store/dealer:

- ❒ Availability of product
- ❒ Friend/Relative's recommendation
- ❒ Store credit card
- ❒ Knowledgeable staff
- ❒ Availability of lessons
- ❒ Technical instruction
- ❒ Past favorable experience
- ❒ Best price
- ❒ Advertised special
- ❒ Convenient location
- ❒ Received as a gift
- ❒ Other _____

5. Where do you most often shop for music and sound products?

- ❒ Independent retailer
- ❒ Mass market retailer
- ❒ Mail order magazines
- ❒ Newspaper ads
- ❒ Internet/Web sites
- ❒ Other _____

6. What two (2) factors most influenced your purchase of this product?

- ❒ Peavey brand name
- ❒ Craftsmanship
- ❒ Features for price
- ❒ Bundled accessories
- ❒ Sound quality
- ❒ Product appearance
- ❒ Durability
- ❒ Prior experience with Peavey
- ❒ Packaging
- ❒ Other _____

7. How did you learn about this Peavey product? *(select best answer)*

- ❒ Magazine review
- ❒ Newspaper review
- ❒ Radio advertisement
- ❒ Advertised special
- ❒ Friend/Relative's recommendation
- ❒ Salesperson's recommendation
- ❒ Teacher's recommendation
- ❒ Catalog or flyer
- ❒ Saw in store
- ❒ Use by professional
- ❒ Other _____

8. Which other brands/models did you consider?

9. How would you describe your level of musicianship/technical expertise?

- ❒ Beginner - Never played or taken less than one (1) year of lessons
- ❒ Intermediate - One (1) to five (5) years of lessons or playing
- ❒ Advanced - More than five (5) years of lessons or playing; play professionally

10. Education: *(select best answer)*

- ❒ High school
- ❒ Some college
- ❒ Completed college
- ❒ Graduate school

11. Which best describe your family income? *(select best answer)*

- ❒ Under $15,000
- ❒ $15,000 - $24,999
- ❒ $25,000 - $34,999
- ❒ $35,000 - $49,999
- ❒ $50,000 - $74,999
- ❒ $75,000 - $99,999
- ❒ $100,000 - $149,999
- ❒ Over - $150,000

12. Which of the following is your primary source of information on musical products: *(select best answer)*

- ❒ Television
- ❒ Radio
- ❒ Internet
- ❒ Newspaper
- ❒ Magazines
- ❒ Mail order catalogs
- ❒ Direct mail
- ❒ Literature from manufacturer
- ❒ Other _____

13. What is your main motivation for buying new equipment?

- ❒ Replacing old product
- ❒ Want new and leading edge equipment
- ❒ Fullfill a specific need
- ❒ Supplement existing products
- ❒ Value
- ❒ Impulse
- ❒ Need for improved performance
- ❒ New technology
- ❒ Availability of product
- ❒ Other _____

14. Please list your three most frequently visited Web sites.

1. http://_____
2. http://_____
3. http://_____

15. In your opinion, what could Peavey do to improve its products and/or service? Please use the space below to tell us your answer.

_____

_____

_____

Revised 1/11

Thank you for taking the time to fill out our survey! Don't forget to fold and tape (with Peavey address facing out), affix postage stamp and drop in the mail!

Logo referenced in Directive 2002/96/EC Annex IV (OJ(L)37/38,13.02.03 and defined in EN 50419: 2005

The bar is the symbol for marking of new waste and is applied only to equipment manufactured after 13 August 2005

FROM:

_____

_____

_____

_____

Place Postage Here



Peavey Electronics Corporation

Attn: Warranty Department
P.O. Box 5108
Meridian, Ms 39302-5108