

# SPECIFICATIONS SP™ 5BX



**Frequency response, 1 meter on-axis, swept-sine in anechoic environment:**  
69 Hz to 17 kHz

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

**Power handling:**  
**Full range:**  
400 watts continuous  
800 watts program  
1,600 watts 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:**  
125 dB SPL continuous  
131 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" SP-15825 Scorpion® Plus HO Woofer

**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: 54 Hz

**Crossover frequency (internal passive):**  
Low frequency – high frequency  
1,800 Hz

**Impedance (Z):**  
**Full Range:**  
Nominal: 8.0 Ω  
Minimum: 5.9 Ω

**Input connections:**  
Full range: two 1/4" phone jacks and one four-pin twist lock connector

**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 incorporated and four large rubber feet on bottom for floor use

**Dimensions (H x W x D):**  
**Front:**  
28.188" x 20.5" x 17.33"  
715.98 mm x 520.7 mm x 440 mm

**Rear:**  
28.188" x 12.75" x 17.33"  
715.98 mm x 323.85 mm x 440 mm

**Net weight:**  
68.2 lbs. (30.9 kg)

- Features**
- Two-way, full-range sound reinforcement system
  - 15" Scorpion® Plus HO woofer with field-replaceable basket
  - RX™ 22 compression driver with ferrofluid cooling
  - Patented Quadratic Throat Waveguide™ technology
  - Asymmetrical horn aims the sound down 10° (at the audience, not over their heads)
  - 800 watts program, 1600 watts peak
  - Sound Guard™ III tweeter protection
  - Full-range inputs include a four-pin twist lock connector and two 1/4" phone jacks
  - Trapezoidal enclosure
  - Stand-mount adapter



# SPECIFICATIONS SP™ 5BX

## Description

The SP 5BX is a two-way speaker system comprised of a high output 15" Scorpion® Plus HO woofer with a Kevlar®-impregnated cone and an RX™ 22 compression driver loaded onto a patented Quadratic Throat Waveguide™.

The SP 5BX has a trapezoidal-shaped enclosure, which reduces the buildup of standing waves inside the enclosure to minimize mid-bass and midrange 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. A built-in SA-1 stand-mount adapter accommodates speaker stand use.

The low frequencies are supplied by a 15" Scorpion Plus HO woofer with a Kevlar-impregnated cone and a highly linear suspension. The high frequencies are handled by a 2" RX 22 titanium diaphragm compression driver utilizing ferrofluid cooling. This superb driver is 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. This horn has 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 helps reduce ceiling reflections, ensuring greater clarity and gain before feedback. The RX22 driver features the Radialinear Planar Phase Correction System (U.S. Patent #6,064,745), which provides smooth and extended high frequency response.

Input connection to the system is made via two 1/4" phone jacks and one four-pin twist lock connector in parallel. The internal passive crossover features Sound Guard™ III tweeter protection circuit and an advanced topology crossover with high-performance components to provide high power handling and reliability.

Sound Guard, Peavey's proprietary high frequency driver protection

circuitry, provides long- and medium-term driver overload protection without impairing musical transients or dynamics when the system is used full range. The crossover provides driver roll-off and protection as well as driver EQ for the woofer 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 69 Hz to 17 kHz.

Despite its compact dimensions, this system can produce very high sound levels and handle 800 watts program power, resulting in clean coverage with 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 5BX 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 5BX combine to give a smooth frequency response from 69 Hz to 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 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.

## 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.

# SPECIFICATIONS SP™ 5BX

## Architectural & Engineering Specifications

The loudspeaker system shall have an operating bandwidth of 69 Hz to 17 kHz. The nominal output level shall be 99.0 dB when measured at a distance of one meter with an input of 1 watt. The nominal impedance shall be 8.0 ohms. The maximum continuous power handling shall be 400 Watts, with maximum program power of 800 watts, peak power input of at least 1,600 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 28.188" inches

high by 20.5 inches wide by 17.325 inches deep. The weight shall be 68.2 lbs. The loudspeaker system shall be a Peavey model SP™5.

### 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.

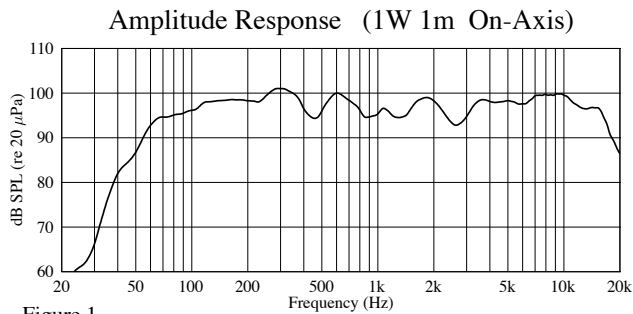


Figure 1

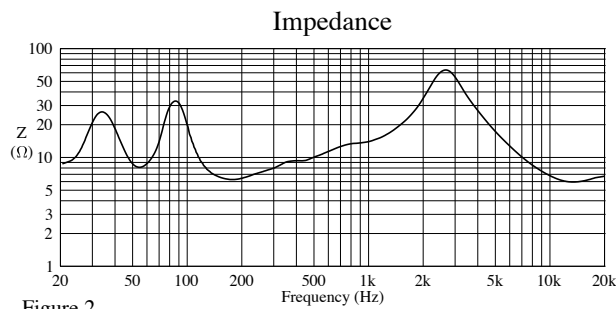


Figure 2

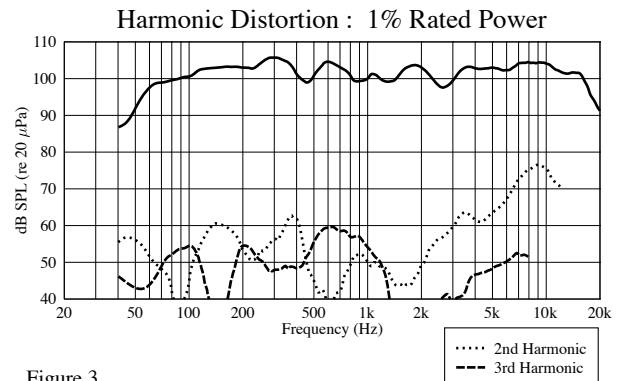


Figure 3

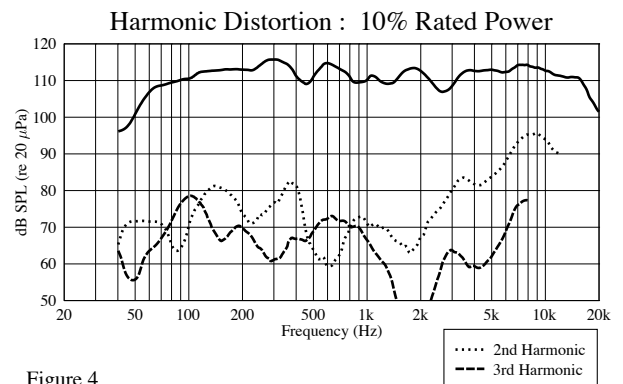


Figure 4

SP 5BX Input Plate

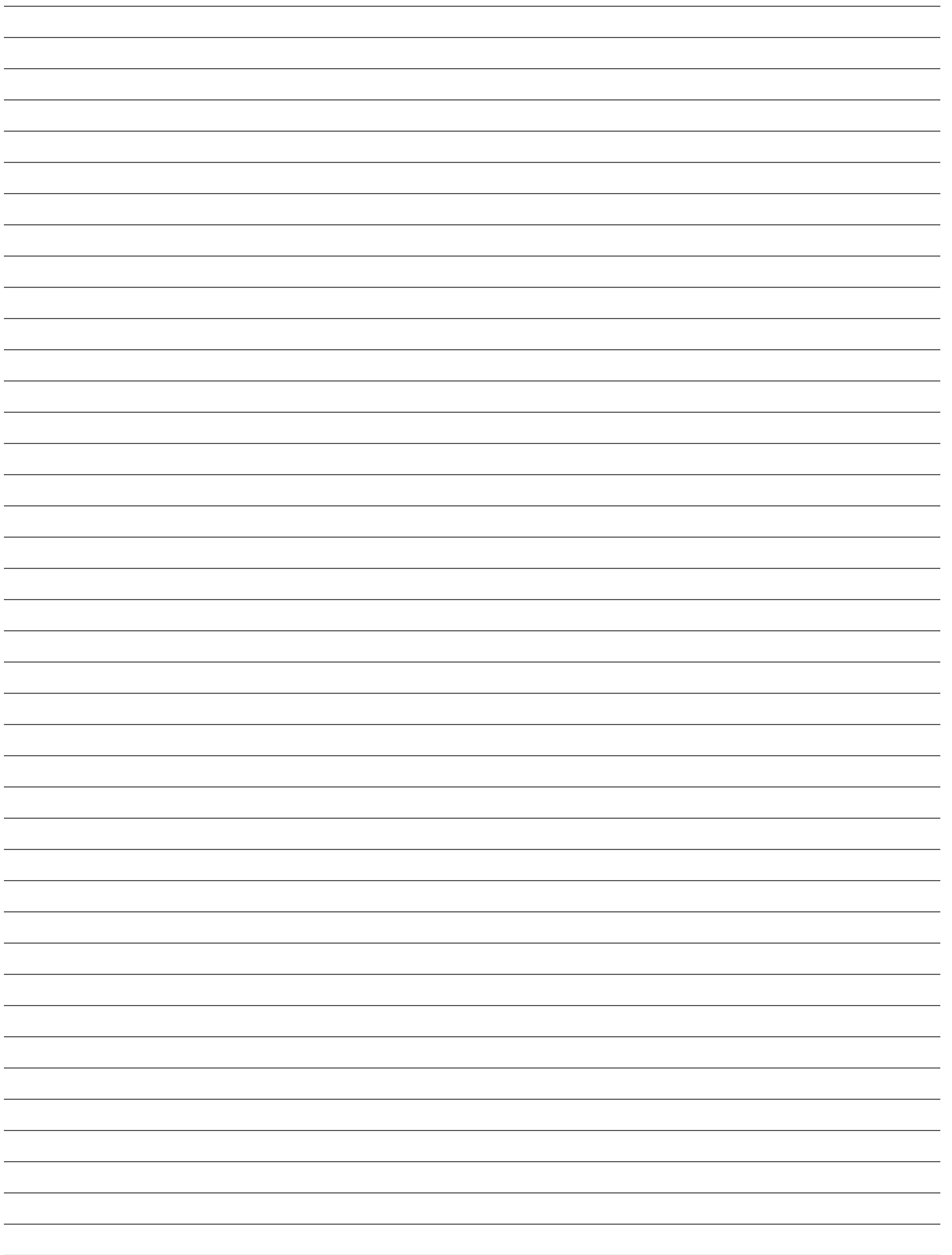


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Features and specifications are subject to change without notice.

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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

## 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](http://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:**

- |   |  |
|---|--|
| <input type="checkbox"/> Availability of product          | <input type="checkbox"/> Past favorable experience |
| <input type="checkbox"/> Friend/Relative's recommendation | <input type="checkbox"/> Best price                |
| <input type="checkbox"/> Store credit card                | <input type="checkbox"/> Advertised special        |
| <input type="checkbox"/> Knowledgeable staff              | <input type="checkbox"/> Convenient location       |
| <input type="checkbox"/> Availability of lessons          | <input type="checkbox"/> Received as a gift        |
| <input type="checkbox"/> Technical instruction            | <input type="checkbox"/> Other _____               |

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

- |   |   |
|---|---|
| <input type="checkbox"/> Independent retailer | <input type="checkbox"/> Newspaper ads      |
| <input type="checkbox"/> Mass market retailer | <input type="checkbox"/> Internet/Web sites |
| <input type="checkbox"/> Mail order magazines | <input type="checkbox"/> Other _____        |

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

- |  |   |
|--|---|
| <input type="checkbox"/> Peavey brand name   | <input type="checkbox"/> Product appearance           |
| <input type="checkbox"/> Craftsmanship       | <input type="checkbox"/> Durability                   |
| <input type="checkbox"/> Features for price  | <input type="checkbox"/> Prior experience with Peavey |
| <input type="checkbox"/> Bundled accessories | <input type="checkbox"/> Packaging                    |
| <input type="checkbox"/> Sound quality       | <input type="checkbox"/> Other _____                  |

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

- |   |   |
|---|---|
| <input type="checkbox"/> Magazine review                  | <input type="checkbox"/> Teacher's recommendation |
| <input type="checkbox"/> Newspaper review                 | <input type="checkbox"/> Catalog or flyer         |
| <input type="checkbox"/> Radio advertisement              | <input type="checkbox"/> Saw in store             |
| <input type="checkbox"/> Advertised special               | <input type="checkbox"/> Use by professional      |
| <input type="checkbox"/> Friend/Relative's recommendation | <input type="checkbox"/> Other _____              |
| <input type="checkbox"/> Salesperson's recommendation     |   |

**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)**

- |  |  |
|--|--|
| <input type="checkbox"/> Under \$15,000      | <input type="checkbox"/> \$75,000 - \$99,999   |
| <input type="checkbox"/> \$15,000 - \$24,999 | <input type="checkbox"/> \$100,000 - \$149,999 |
| <input type="checkbox"/> \$25,000 - \$34,999 | <input type="checkbox"/> Over - \$150,000      |
| <input type="checkbox"/> \$35,000 - \$49,999 |  |
| <input type="checkbox"/> \$50,000 - \$74,999 |  |

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

- |                                     |   |
|-------------------------------------|---|
| <input type="checkbox"/> Television | <input type="checkbox"/> Mail order catalogs          |
| <input type="checkbox"/> Radio      | <input type="checkbox"/> Direct mail                  |
| <input type="checkbox"/> Internet   | <input type="checkbox"/> Literature from manufacturer |
| <input type="checkbox"/> Newspaper  | <input type="checkbox"/> Other _____                  |
| <input type="checkbox"/> Magazines  |   |

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

- |  |  |
|--|--|
| <input type="checkbox"/> Replacing old product               | <input type="checkbox"/> Impulse                       |
| <input type="checkbox"/> Want new and leading edge equipment | <input type="checkbox"/> Need for improved performance |
| <input type="checkbox"/> Fulfill a specific need             | <input type="checkbox"/> New technology                |
| <input type="checkbox"/> Supplement existing products        | <input type="checkbox"/> Availability of product       |
| <input type="checkbox"/> Value                               | <input type="checkbox"/> 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.**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_





**Peavey Electronics Corporation**  
Attn: Warranty Department  
P.O. Box 5108  
Meridian, Ms 39302-5108



**FROM:**

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Place  
Postage  
Here