

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

89 Hz - 18 kHz (±3 dB)

Usable Low Frequency limit (-10 dB point anechoic):

48 Hz

Power Handling:

Full Range: 500W continuous 1000W program 2000W peak

Low Frequency Section: 450W continuous 900W program 1,800W peak

High Frequency Section: 6oW continuous 12oW program 24oW peak

Sound Pressure Level, 1 Watt, 1 meter in anechoic environment:

Full Range: 97 dB SPL, (2.83V input)

Low Frequency Section: 100 dB SPL, (2.83V input)

High Frequency Section: 110 dB SPL, (2.83V input)

Maximum Sound Pressure Level (1 meter):

Full Range: 124 dB SPL continuous 130 dB SPL peak

Low Frequency Section: 126 dB SPL continuous 132 dB SPL peak

High Frequency Section: 128 dB SPL continuous 134 dB SPL peak

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

Nominal: 100° horizontal X 50° vertical Axis of the vertical main polar lobe is angled down 10°, resulting in

Axis of the vertical main polar lobe is angled down 10°, resulting in the angular pattern with respect to straight ahead being +15, -35°

500 Hz – 1.6 kHz: Horiz.115° +/- 30° Vert. 129° +/- 40° 1.6 kHz - 5 kHz: Horiz.75° +/- 10° Vert. 72° +/- 15° 5 kHz - 16 kHz: Horiz.84° +/- 5° Vert. 53° +/- 10°

Directivity Factor, Q (Mean):

8.0 +/- 5.3

Directivity Index, Di (Mean):

 $8.6 \, dB + / - 3.3 \, dB$

Transducer Complement:

Low Frequency Section: SDC 1244 Neo, Dual Voice Coil Neodymium Magnet Scorpion®

High Frequency Section:

1x .875 in. Exit/51mm Voice Coil
RX™22 Titanium Diaphragm
Compression Driver on an
asymmetric Quadratic Throat
Waveguide™

Box Tuning Frequency: Low Frequency Section:

50 Hz

Harmonic Distortion: 1% rated power

2nd Harmonic:

100 Hz: 0.84% 1 kHz: 0.14%

3rd Harmonic:

100 Hz: 0.42 % 1 kHz: 0.51% 10% rated power

2nd Harmonic:

100 Hz: 1.53% 1 kHz: 0.31%

3rd Harmonic:

100 Hz: 2.56% 1 kHz: 0.91%

Crossover Frequency (internal passive):

Low Frequency - High Frequency: 1.75 kHz



Recommended Active Crossover Frequency Region and Slope:

Low Frequency - High Frequency: 1800 Hz at 24 dB/octave

Note: This is a general purpose setting for analog crossovers, for crossover/ processor settings compatible with Peavey digital crossover processors, and many other brands of digital processors, see page 8 for detailed settings.

Time Offset:

Low Frequency: 0.37 ms, delay High Frequency: 0.0 ms

Impedance (Z) in ohms (Ω):

Full Range:

Nominal: 8.0 Ω Minimum: 5.7 Ω

Low Frequency:

Nominal: 8.0 Ω Minimum: 5.7 Ω

High Frequency:

Nominal: 8.0 Ω Minimum: 5.4 Ω

Input Connections:

Two 4-pin twist lock connectors in parallel for full range input, and one 4-pin switching Neutrik® Speakon® jack for bi-amp use.

Enclosure Materials & Finish:

Thirteen ply 18 mm birch plywood finished in black HammerHead™ polyurethane finish Full-length wrap-around 16 ga. perforated steel grille with an inner polycloth liner and a black powder coat finish.

Mounting provisions:

This unit is not designed for overhead suspension.

Dual-angle stand mount adapter built-in, and four large rubber feet on bottom for floor use.

Dimensions (H x W x D):

Front:

23.88 in. x 15.13 in. x 16.25 in. 606 mm x 384 mm x 413 mm

Rear:

23.88 in. x 7.88 in. x 16.25 in. 606 mm x 200 mm x 413 mm

Net Weight:

45 Lbs. (20.5 kg)

Features

- 2-way full range sound reinforcement system
- RX[™]22 compression driver with ferrofluid cooling
- 12" Scorpion® Neo dual voice coil woofer
- 1000 W program, 2000 W peak
- Patented Quadratic Throat Waveguide[™] technology
- Asymmetrical horn aims the sound down 10°, at the audience, not over their heads.
- Monitor use with angled side/rear panel (monitor use rubber feet provided)
- Sound Guard™ III tweeter protection
- Full range inputs are two 4-pin twist lock connectors, and one switching Neutrik® Speakon® bi-amp jack
- Trapezoidal birch plywood enclosure
- Durable HammerHead™ polyurethane finish
- Dual angle stand mount adapter

Description

The EU[™] 112 has a new asymmetrical Quadratic Throat Waveguide[™] for the tweeter, and an enclosure made from birch plywood. It is a two-way speaker system comprised of a high output 12" Scorpion® Neo dual voice coil woofer and an RX™ 22 compression driver loaded onto the patented Quadratic Throat Waveguide™.

The EU[™] 112 has a trapezoidal shaped multi-angled enclosure, which reduces the build-up of standing waves inside the enclosure, which minimizes mid-bass and mid-range coloration's due to the cabinet. It is constructed of 13-ply birch plywood and is finished in a durable black HammerHead™ finish. A full-length wrap-around powder-coated perforated metal grille covers the front of the cabinet, providing a very smooth look. One side is multi-angled to allow use as a floor monitor, and a dual angle stand mount adapter is built-in on one end for precision and ease of speaker stand use.

The low frequencies are supplied by a 12" BWX™ DVC 12 Neo, dual voice coil woofer and a highly linear suspension. The dual voice coils

in conjunction with a Neodymium magnet structure with extensive heat sink fins provide an outstanding power handling capability of over 450W for the woofer. The high frequencies are handled by an RX[™] 22 2" titanium diaphragm compression driver utilizing ferrofluid cooling. This superb driver is coupled to a Quadratic Throat™ constant directivity waveguide, covered under US patent #6,059,069 with 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°, so it is aimed at the audience, instead of over their heads. This helps reduce ceiling reflections for greater clarity and gain before feedback. The RXT 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 4-pin twist lock connectors in parallel, and a switching Neutrik® Speakon® bi-amp jack is also provided. The internal passive crossover features the Sound Guard™ III tweeter protection circuit, and 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 89 Hz to 18 kHz.

Despite its compact dimensions and light weight for a 12" based two-way enclosure, this system can put out some very serious sound levels, and take 1000 watts program of clean amplifier power, resulting in clean coverage with high articulation and good reliability.

Frequency Response

This measurement is useful in determining how accurately a given unit reproduces an input signal. The frequency response of the EU™ 112 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 combine to give a smooth frequency response from 89 Hz to 18 kHz.

Directivity

Beamwidth is derived from the -6 dB points from the polar plots (see figure 3), which are measured in a whole space anechoic environment. Q and Directivity Index are plotted for the on-axis measurement position. These are specifications that provide a reference to the coverage characteristics of the unit. These parameters provide insight for proper placement and installation in the chosen environment. The blending of the components of the exhibit a desirable beamwidth and directivity (figure 3 & 4) suitable for sound reinforcement applications.

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.

Mounting

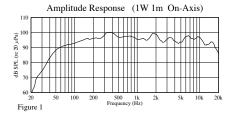
This unit is not designed for over head suspension. A metal stand mount adapter is incorporated, and five large rubber feet on the bottom for floor use. Four low-profile rubber feet are supplied along with four black screws to allow the end user to install feet on the monitor side wall for frequent use in the monitor position.

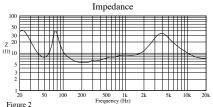
Architectural & Engineering Specifications

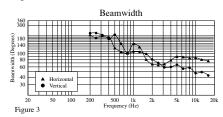
The loudspeaker system shall have an operating bandwidth of 89 Hz to 18 kHz. The nominal output level shall be 96 dB when measured at a distance of one meter with an input of one watt. The nominal impedance shall be 8 ohms. The maximum continuous power handling shall be 500 watts, maximum program power of 1000 watts and a peak power input of at least 2000 watts, with a minimum amplifier headroom of 3 dB. The nominal radiation geometry shall be 100° in the horizontal plane and 50° in the vertical plane. The outside dimensions shall be 23.88" high x 15.13" wide x 16.25" deep. The weight shall be 45 pounds. The loudspeaker system shall be a Peavey model EU^m 112.

Notes On Use As a Monitor

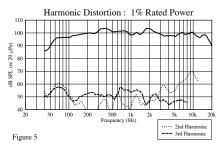
When using the EU™ 112 as a floor monitor, the best axis to listen on when in close for monitor use, is in line with the woofer. This is due to the designed-in polar tilt of the asymmetrical Quadratic Throat Waveguide™. Four low-profile rubber feet are supplied along with four black screws to allow the end user to install feet on the monitor side wall so that the cabinet will not vibrate against or slide across the floor.

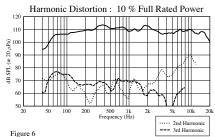


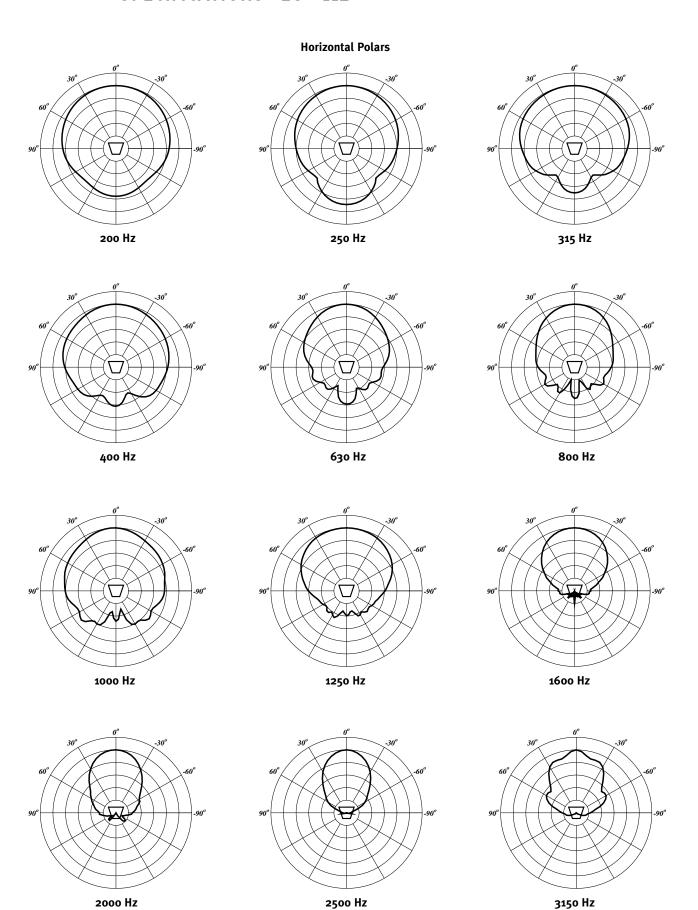




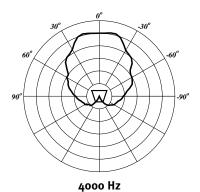


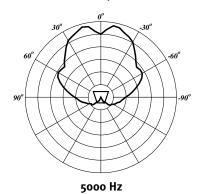


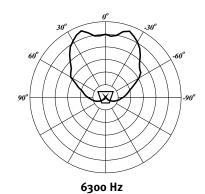


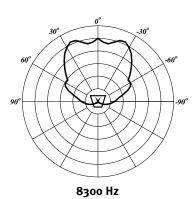


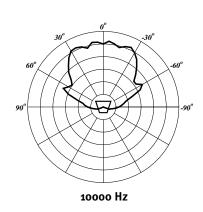
Horizontal Polars, Continued

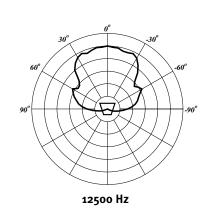


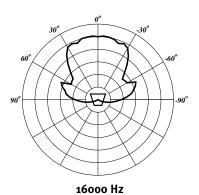


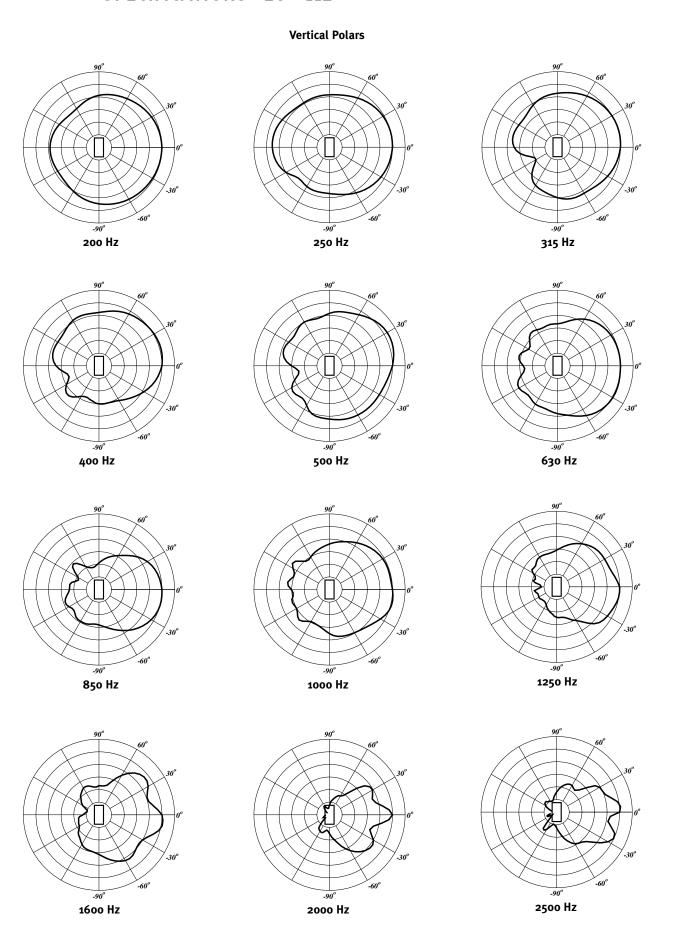




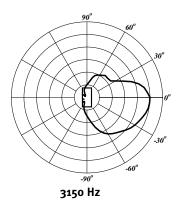


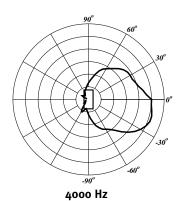


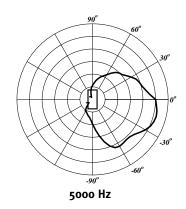


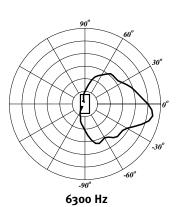


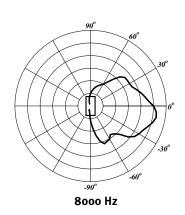
Vertical Polars, Continued

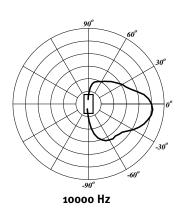


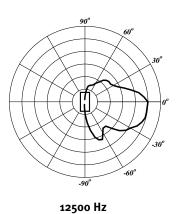


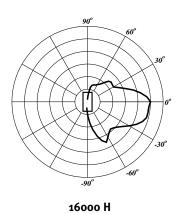












EU™ 112 Crossover/Processor Settings & EQ

Infrasonic filtering:

Filter/Gate = High Pass 12dB/oct., 34 Hz, q= 0.71; EQ = High Pass 12dB/oct., 34Hz, q= 0.71 (equivalent to a 24 dB/oct. Linkwitz-Riley @ 40 Hz). Alternate setting for tight bass: 24 dB/oct. Bessel @ 40 Hz)

Crossover settings:

Woofer= 24 dB/oct. Linkwitz-Riley @ 1.52 kHz, Tweeter= 24 dB/oct. Linkwitz-Riley @ 1.71 kHz

Driver Polarity:

Woofer Polarity Normal, Tweeter Polarity Normal

Drive Level (Gain):

Woofer= o dB, Tweeter= - 4.5 dB

Woofer Delay:

0.227 milliseconds

EQ after crossover:

Woofer EQ = L_Shelf +6.0 dB @ 160 Hz; PEQ -3.5 dB @ 375 Hz, bw=0.577 PEQ +1.5 dB @ 730 Hz, bw=0.577; PEQ +2.0dB @ 1110 Hz, bw=0.707

Tweeter EQ= PEQ -4.0 dB @ 2.64 kHz, bw=1.305; PEQ -5.0 dB @ 2.23 kHz, bw=0.5; PEQ +3.5 dB @ 4.92 kHz, bw=0.577; PEQ -5.0 @ 6.48kHz, bw=0.5; PEQ +6 dB @ 14.7 kHz, bw=1.0

NOTE: For room EQ, use processor front end (input channel) EQ, do not alter woofer or tweeter EQ.

Processor Setting Parameters

For processor's that use the parameter "Q" instead of bandwidth in octaves, here is a chart to convert from bw to Q.

NOTE: Q is not as well defined as bandwidth, so some processors may have Q settings that do not exactly correspond to the chart conversions, they may need to be set to one click higher or lower than the chart indicates.

Bandwidth (bw) to Q Chart

bw	Q.
0.25	5.764
0.500	2.871
0.577	2.484
0.707	2.020
1.00	1.414
1.305	1.069
1.50	0.920
2.00	0.667
2.50	0.511

EU™ 112 Input Plate





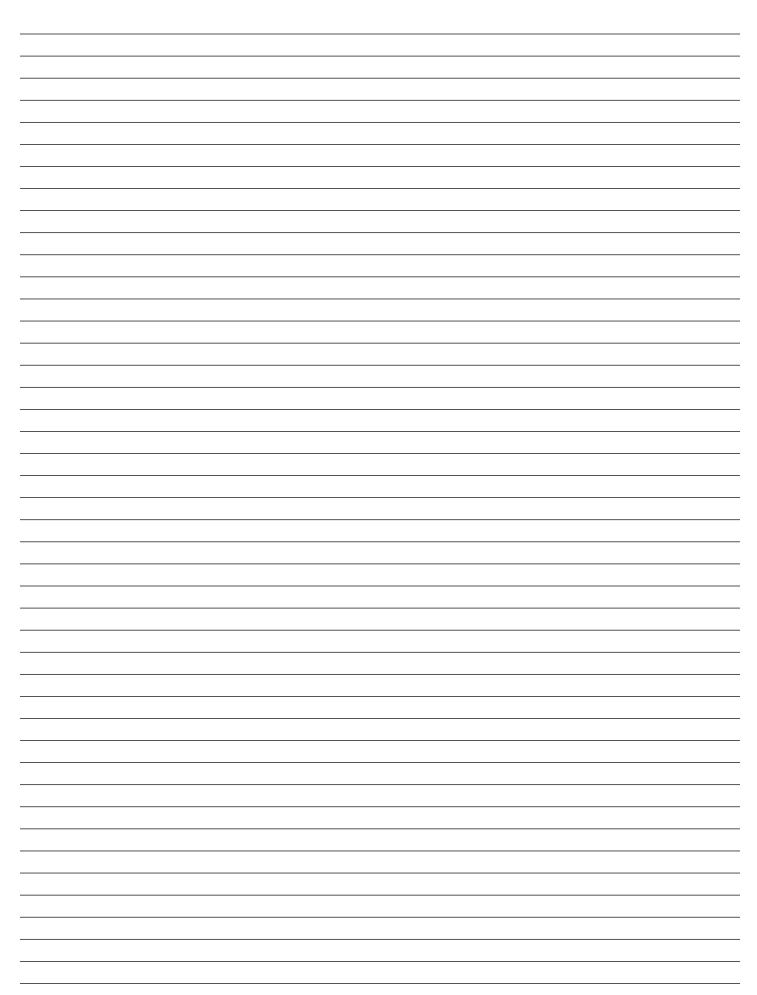
Logo referenced in Directive 2002/96/EC Annex IV (OJ(L)37/38,13.02.03 and defined in EN 50419: 2005
The bar is the symbol for marking of new waste and is applied only to equipment manufactured after 13 August 2005

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Features and specifications are subject to change without notice.

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PEAVEY ELECTRONICS CORPORATION LIMITED WARRANTY

Effective Date: 03/04/2010

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
Rockmaster Series, Strum'n Fun, Vectra, Rotor, OCC Stage pack, GT & BT Series amps, Retro Fire, Metal Maker and Iron Wing	1 year

[* 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.

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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.

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.		7. How did you learn about this Peav	rey product? (select best answer)
First Name Ir	nitial Last Name	□ 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 yo	u consider?
City Si	tate/Province Postal Code		
Telephone Number	E-mail Address	9. How would you describe your level of musicianship/technical expertise?	
() Fax Number	Date of Birth	☐ 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 professionall	
Gender □ M □ F			, , , , , , , , , , , , , , , , , , , ,
2. [Model 8	B-Digit Serial Number	 ■ 10. Education: (select best answer) □ High school □ Some college □ Completed college □ Graduate school 	
Date of Purchase Pr	ice Paid	11. Which best describe your family	income? (select best answer)
3.		☐ Under \$15,000 ☐ \$15,000 - \$24,999 ☐ \$25,000 - \$34,999	□ \$75,000 - \$99,999 □ \$100,000 - \$149,999 □ Over - \$150,000
Name of store where purchased		□ \$35,000 - \$49,999 □ \$50,000 - \$74,999	5 eve. \$100,000
City	State	12. Which of the following is your primary source of information on musical products: (select best answer)	
4. Top two (2) reasons why you ☐ Availability of product ☐ Friend/Relative's recommenda ☐ Store credit card ☐ Knowledgeable staff ☐ Availability of lessons	purchased from this store/dealer: Past favorable experience ation Best price Advertised special Convenient location Received as a gift	☐ Television ☐ Radio ☐ Internet ☐ Newspaper ☐ Magazines	☐ Mail order catalogs☐ Direct mail☐ Literature from manufacturer☐ Other
☐ Technical instruction	Other	13. What is your main motivation for buying new equipment?	
□ Independent retailer □ Mass market retailer □ Mail order magazines	op for music and sound products? Newspaper ads Internet/Web sites Other Underducted your purchase of this product?	 □ 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
o. What two (2) factors most init ☐ Peavey brand name	☐ Product appearance	44 Di	
☐ Craftsmanship ☐ Features for price ☐ Bundled accessories ☐ Sound quality	☐ Durability ☐ Prior experience with Peavey ☐ Packaging ☐ Other	14. Please list your three most frequently visited Web sites. 1. http:// 2. http:// 3. http://	





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