



SPECIFICATIONS

Frequency response:

54 Hz to 18 kHz

Low frequency limit (-3 dB point):

54 Hz

Usable low frequency limit (-10 dB point):

45 Hz

Internal power amplifiers (@ 120 VAC line):

Woofer — 800 Watts peak dynamic power
400 Watts at clipping

Tweeter — 200 Watts peak dynamic power
100 Watts at clipping

Nominal sensitivity (1 Watt @ 1 meter, swept sine input in an anechoic environment):

100 dB

Maximum sound pressure level @ 1 meter:

130 dB music peak

Nominal radiation angle:

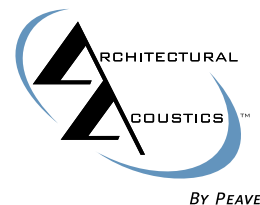
90° horizontal by 45° vertical

Transducer compliment:

Black Widow® BWX 15" woofer, model 1508-4 SPS and RX™ 22 2" titanium diaphragm compression driver tweeter

Box tuning frequency (F-box):

54 Hz



Specifications Quadra 15P

Electroacoustic crossover frequency:
1,600 Hz

Crossover type:

Internal, electronic two-way crossover with CD horn EQ, level matching, active bass boost and subsonic filtering. The horn is spatially aligned with the woofer, eliminating the need for phase alignment or signal time delay.

Crossover slopes:

18 dB/octave (third order) low pass and 18 dB/octave (third order) high pass, both with staggered poles and driver EQ.

Electronic input impedance (nominal):

10 k Ohms unbalanced, 20 k Ohms balanced.

Input connections:

One combo female XLR and 1/4" phone jack and one male XLR, all providing balanced operation in parallel. One male XLR microphone level input, that is ON/OFF switchable. Also has a 1/4" phone jack-based loop-thru that allows one other Quadra 15P unit to be linked to the first unit for signal source and Volume control.

Contour switch:

Reduces mid-range by approximately 4 dB, from 300 Hz to 2 kHz.

Enclosure materials and finish:

Injection-molded, high-impact polypropylene of a nominal thickness of 1/4" with internal ribbing and bracing and with textured finish, having a UL flame-rating. Enclosure material is black.

Mounting:

Flying via Versamount™ 70 (top or bottom of cabinet), and four rubber feet for floor use. Array brackets are available.

Dimensions:

Front: 28.50" H x 21.25" W x 17.00" D
724 mm x 540 mm x 432 mm
Rear: 26.75" H x 11.63" W x 17.00" D
679 mm x 295 mm x 432 mm

Optional accessories:
Floor monitor adjustable legs kit

Net weight:
69 lbs.

Shipping weight:
77 lbs.

Additional remarks:
Also available as a passively crossed-over unit, Quadra 15, 8 Ohms

ELECTRONICS AND AMPLIFIER SPECIFICATIONS

Electronic input impedance (nominal):

Primary balanced input: 10 k Ohms unbalanced, 20 k Ohms balanced.
Loop Thru input: High-Z

Infrasonic filter protection:
36 dB/octave roll-off

For both power amps:
Nominal amplifier frequency response:
+0, -1 dB from 10 Hz to 30 kHz

Hum and noise:
Greater than 90 dB below rated power.

SPS™ compression dynamic range:
Greater than 26 dB

THD and IM:
Typically less than 0.1 %

Woofer power amp:
Damping Factor:
Greater than 100 @ 1000 Hz,
4 Ohms.

Power requirements of Quadra 15P system (domestic):
660 Watts maximum, 180 Watts nominal, 120 VAC, 60 Hz

Features

- Bi-amplified, powered system with 1,000 Watts total peak
- Both power amps have SPS™ compression
- Black Widow BWX 15" premium woofer
- 2" RX22 titanium compression driver

- Peak SPLs in excess of 130 dB with music
- 1/4" TRS and M/F XLR line-level balanced inputs
- Separate mixed-mic XLR input
- Molded-in horn with exceptionally smooth response and pattern control
- Loop Out/In jacks allow linkage of multiple units
- Multiple handgrips

Description

The Quadra 15P is a powered, bi-amplified, two-way speaker system engineered to provide the highest levels of performance available in a compact, powered loudspeaker. Capable of over 130 dB peak SPLs, this system can pump out a huge amount of sound. The enclosure utilizes high-impact polypropylene in an injection-molded plastic trapezoidal form with a coated, perforated metal grille for a cosmetically elegant yet durable powered speaker system.

This two-way powered system is comprised of an 800 Watt dynamic peak power amplifier driving a 15" BWX Black Widow woofer (1508-4) with a Kevlar™ impregnated cone, with surround and dust cap specially treated for excellent environmental stability. A 200 Watt peak dynamic power amplifier drives the RX22 compression driver and features a 2" titanium diaphragm with Radialinear Planar Phase Correction in the phase plug (US Patent #6064745). A Quadratic Throat Geometry constant directivity horn (US Patent #6059069) with a coverage pattern of 90° by 45° is molded integrally into the enclosure.

The Quadra 15P houses one combo female XLR, a 1/4" RTS phone jack and one male XLR in its preamp, all connected in parallel. A separate, switchable female XLR microphone input is also provided. The power amplifiers are low distortion units providing 400 W RMS into the nominal 4 Ohm load of the woofer and 100 W RMS into the nominal 6 Ohm load of the tweeter, both selected for their reliability and superb musical performance capability. Both amplifiers feature our patented SPS compression, which virtually eliminates audible power amplifier clipping.

Specifications Quadra 15P

Multiple molded-in handles provide easy transport, while multiple mounting points on top and bottom for the Peavey Versamount 70 and a molded-in stand adapter allow maximum utility.

ARCHITECTURAL AND ENGINEERING SPECIFICATIONS

The Quadra 15P powered loudspeaker system shall have a frequency response from 56 Hz to 18 kHz. The peak SPLs with inaudible distortion shall reach 130 dB with music as a source, when measured at a distance of 1 meter and driven to full output capacity. The system shall utilize a 15" BWX Black Widow® woofer and an RX™ 22 compression driver tweeter. The nominal radiation pattern shall be 90° in the horizontal plane and 45° in the vertical plane.

This powered, bi-amplified loudspeaker system shall have a group of medium impedance input connectors consisting of one combo female XLR and 1/4" TRS phone jack and one male XLR, all on the rear panel and connected in parallel. Additionally, a separate, switchable microphone input (female XLR) shall be provided. A Loop Out and a Loop In

jack shall be provided. A Volume control will be located next to the input jack group.

The system's power amplifiers shall have an unfiltered frequency response of 10 Hz to 30 kHz, which deviates no more than +0, -1 dB up to rated power; a damping factor greater than 100 @ 1 kHz into 4 Ohms; hum and noise better than 90 dB below rated power; and THD and IMD less than 0.1%. The woofer amplifier shall be capable of 400 Watts into a 4 Ohm nominal load and the tweeter amplifier shall be capable of 100 Watts output into a 6 Ohm load, and both shall incorporate independent SPS™ compression.

The input signal shall be electronically divided into high frequencies and low frequencies by a staggered pole, third order slope, line-level crossover at 1.8 kHz. The low frequencies shall be processed to provide bass boost, subsonic filtering and overall response shaping, and the high frequencies shall be equalized for constant directivity horn EQ and response shaping.

The enclosure shall be constructed of 1/4" injection-molded polypropylene with a UL flame rating

and internal reinforcing ribs. A handgrip shall be molded into each side of the woofer and on the top rear edge.

A coated, perforated metal grille shall be provided for woofer protection. The cabinet shall incorporate four tall, sturdy rubber feet for floor-standing use and four mounting point inserts on the top and bottom each for flying use.

The outside dimensions shall be 28.5" high by 21.25" wide (11.5" wide in rear) by 17" deep, and the weight shall be 69 lbs. Power requirements shall be: 660 Watts, 120 V AC, 60 Hz Domestic and 240 VAC, 50 Hz (European). The loudspeaker system shall be called a Peavey Architectural Acoustics® Quadra® 15P.

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.

