

SPECIFICATIONS QW™ -215



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

47 Hz to 1.5 kHz (± 3 dB)

Usable low frequency limit (-10 dB point):

34 Hz

Power handling (both woofers driven):

1200 Watts continuous
2400 Watts program
4800 Watts Peak

Sound pressure level, 1 Watt, 1 meter in an anechoic environment (both woofers driven):

100 dB SPL, (2.0 Volt input)

Maximum sound pressure level (1 meter):

131 dB SPL continuous
137 dB SPL peak

Transducer complement:

2 x 15" individually vented Pro Rider® 15" subwoofers

Box tuning frequency:

40 Hz

Harmonic distortion:

1% rated power

Second Harmonic:

100 Hz: .58%

500 Hz: .33%

Third Harmonic:

100 Hz: .19%

500 Hz: .33%

10% rated power

Second Harmonic:

100 Hz: 1.90%

500 Hz: 1.30%

Third Harmonic:

100 Hz: .51%

500 Hz: .51%

Recommended active crossover frequency region and slope:

150 Hz at 18 dB/octave

Impedance (Z):

Nominal: 8.0 Ohms,
each woofer

Minimum: 6.4 Ohms

Input connections:

2 x four-pin Neutrik® Speakon® inputs in parallel

1 x eight-pin Neutrik Speakon input

1 x four-pin Neutrik Speakon thru (for use with eight-pin input)

Enclosure materials & finish:

3/4" plywood finished in the durable

Black Hammer Head™ polyurea coating

Mounting provisions:

(12) 3/8"-16 threaded mounting suspension points (three each top and bottom and two each side and back). Use only forged shoulder machinery eye bolt, Mil Spec MIL51937-3.

Dimensions (H x W x D):

Front:

48.5" x 21.00" x 30.38"

1232 mm x 533 mm x 772 mm



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Rear:
48.5" x 10.38" x 30.38"
1232 mm x 264 mm x 772 mm

Net Weight:

131 lbs. (59.54 kg)

Features

- Two new Peavey Pro Rider® 15" woofers
- 2400 Watts of program power
- Extreme low frequency response down to 34 Hz
- Neutrik® Speakon® professional input connectors
- Extra compact design
- Black Hammer Head™ hard coat
- Trapezoidal design for arraying

Applications

- Stadiums
- Arenas
- Multi-purpose facilities
- Cruise Ships
- Theme parks
- Concerts
- Theaters

Description

The QW-215 combines two new high power Pro Rider 15" woofers with a new compact trapezoidal cabinet design. The QW-215 is a direct radiator woofer designed specifically for the high end pro-audio user. When used in conjunction with the QW-1 and QW-218 in a four-way application, the sound pressure levels can reach SPLs of 140 dB continuous. The power handling of this system in four-way applications approaches 6800 Watts program.

The new Pro Rider 15" driver is a milestone in high power subwoofer design. Its incredible 2400 Watt program rating and extra-long cone excursion produce amazing new levels of clean, deep bass, making the QW-215 a superior choice for the bottom end of any high powered sound system (primarily large, professional touring shows).

The QW-215 trapezoid enclosure is unusually compact for its power handling, SPL output, distortion performance and bass extension. This is made possible by special characteristics designed into the Pro Rider woofer.

The QW-215 is well braced, as internal pressures produced by the Pro Rider

woofer can be very high. A special vent design integrated into the enclosure includes a vertical brace to further increase enclosure strength.

The QW-215's large vent area and long path length allow for a large volume of air to move with very low resistance. This is important due to the huge volumes of air flow that the Pro Rider woofer can produce.

The QW-215 is constructed of premium .720" plywood and covered with a tough, durable black Hammer Head™ polyurea coating, making this enclosure rugged and very road-worthy. A 16-gauge powder-coated, perforated metal grille covers the front of the system to protect the speakers from external damage.

Inputs include two four-pin Neutrik jacks in parallel; an eight-pin Neutrik; and a four-pin Neutrik thru jack for bi-amping flexibility while maintaining superior signal integrity. A standard four-pin Neutrik jack in parallel allows for simple daisy-chaining to another cabinet when bi-amping.

Despite its compact dimensions, this system can output extremely high sound levels and receive 2400 Watts program of clean amplifier power, resulting in large area coverage with excellent punch and high reliability.

Frequency response

This measurement is useful in determining how accurately a given unit reproduces an input signal. The frequency response of the QW-215 is measured at a distance of 1 meter using a 1 Watt swept-sine input signal (into the nominal impedance). As shown in Figure 1, the selected drivers in the QW-215 combine to give a smooth frequency response from 47 Hz to 1.5 kHz.

Power handling

Peavey rates this loudspeaker system's power handling using a modified form of the AES Standard 2-1984. Using audio band 40 Hz to 400 Hz pink noise with peaks of four times the RMS level, our strenuous testing assures 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.

Harmonic distortion

Second and third harmonic distortions vs. frequency are plotted in Figures 3 and 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 the difference between the fundamental signal (frequency response) and the desired harmonic. For example, a distortion curve down 40 dB from the fundamental is equivalent to 1% distortion.

Mounting

⚠ Caution: Before attempting to suspend this speaker, consult a certified structural engineer. This speaker can fall from improper suspension, resulting in serious injury and property damage. Other enclosures may be suspended below a QW-215 but the combined weight of additional enclosures and all cables, clamps and other hardware must not exceed 319 lbs. The QW-215 weighs 131 lbs. and the maximum combined weight suspended from the uppermost mounting bracket assemblies must not exceed 450 lbs. The maximum enclosure angle is 45°. Use only the correct mating hardware. All associated rigging is the responsibility of the user.

Architectural and engineering specifications

The loudspeaker system shall have an operating bandwidth of 47 Hz to 1.5 kHz. The nominal output level shall be 100 dB when measured at a distance of 1 meter with an input of 1 Watt. The nominal impedance shall be 4 Ohms (both woofers driven). The maximum continuous power handling shall be 1200 Watts, with maximum program power of 2400 Watts and a peak power input of at least 4800 Watts (with a minimum amplifier headroom of 3 dB). The outside dimensions shall be 48.5" high by 21" wide by 30.38" deep. The weight shall be 131 pounds. The loudspeaker system shall be a model QW-215.

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.

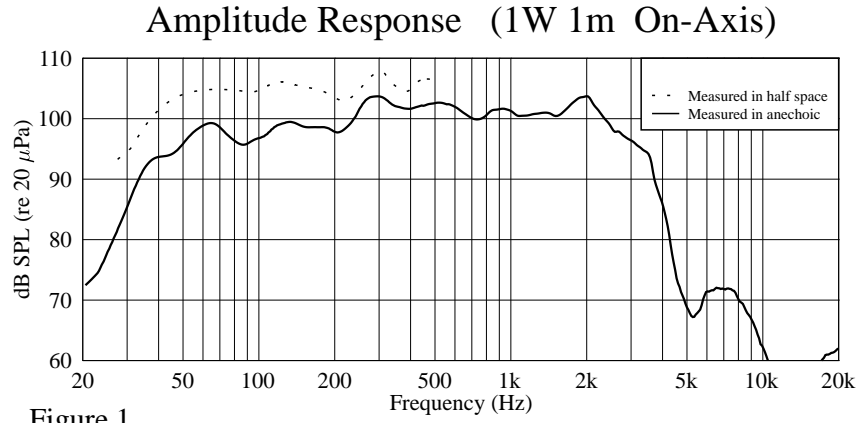


Figure 1

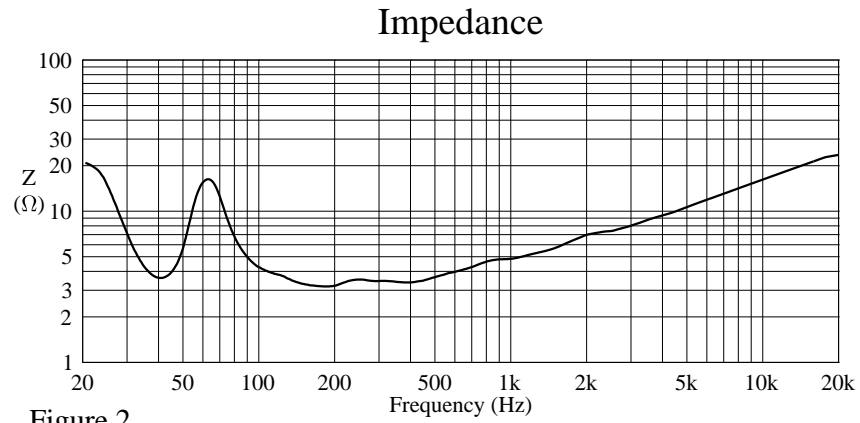


Figure 2

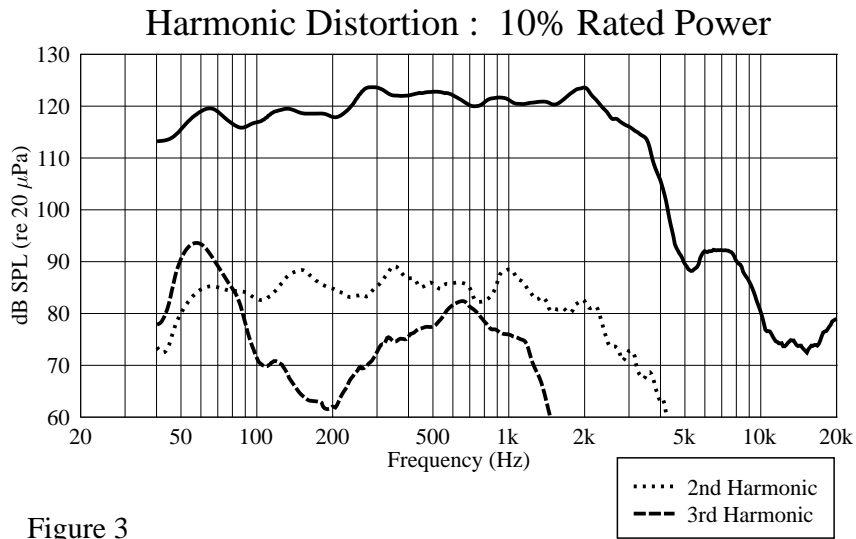


Figure 3

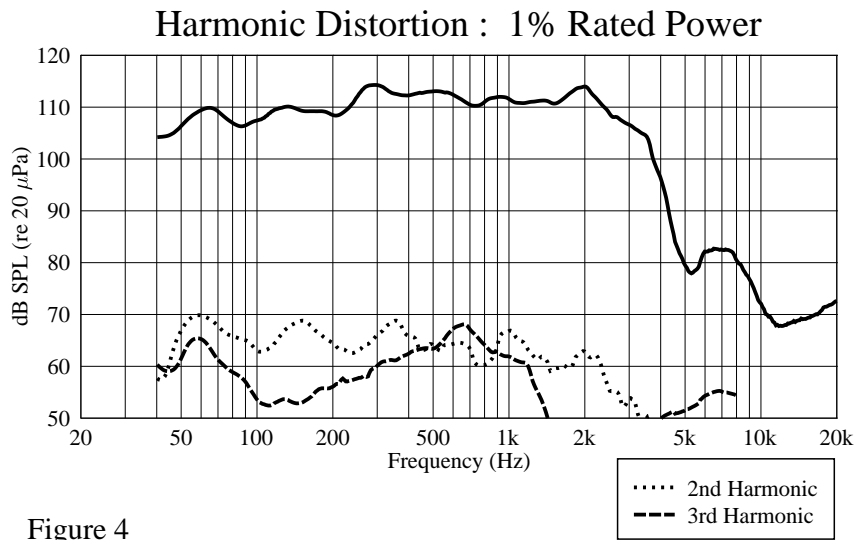
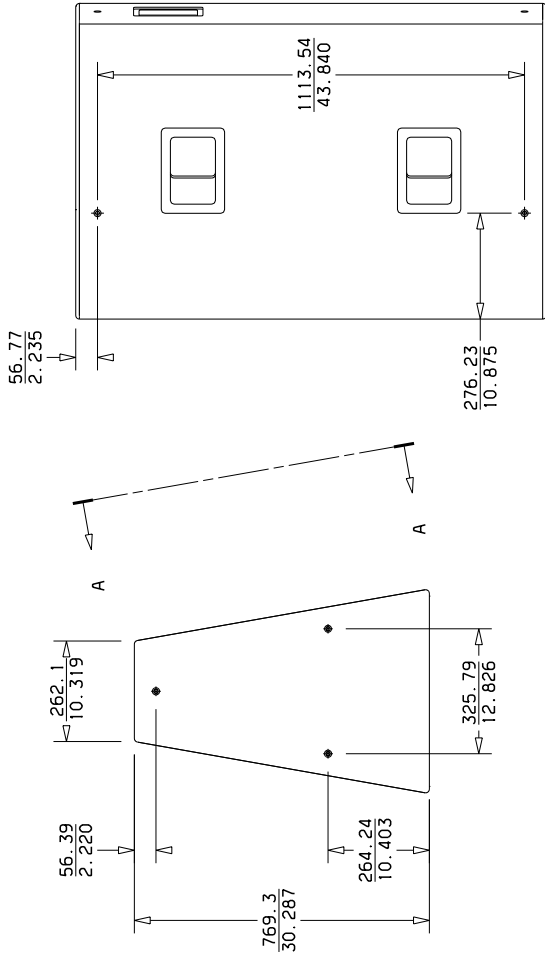
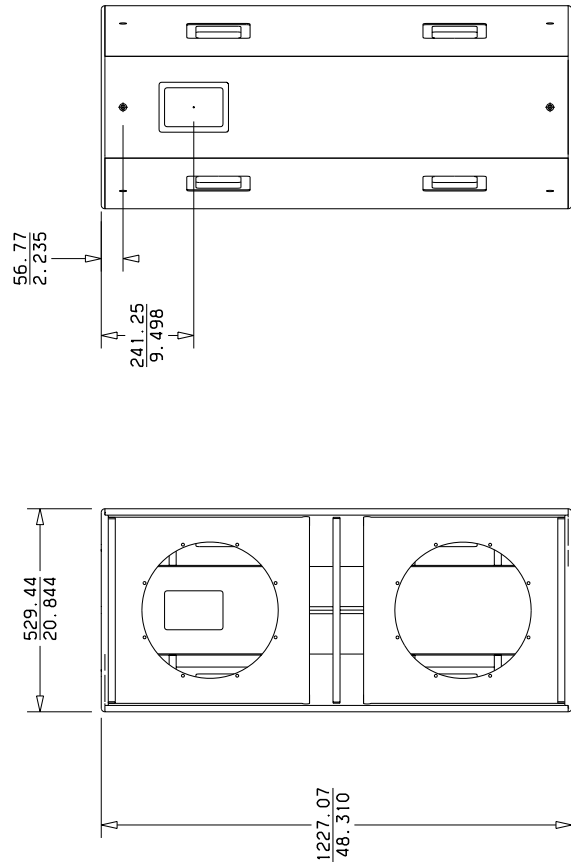


Figure 4

Flying points dimensions



VIEW A:A



SPECIFICATIONS

QW™-215



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Features and specifications subject to change without notice.

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