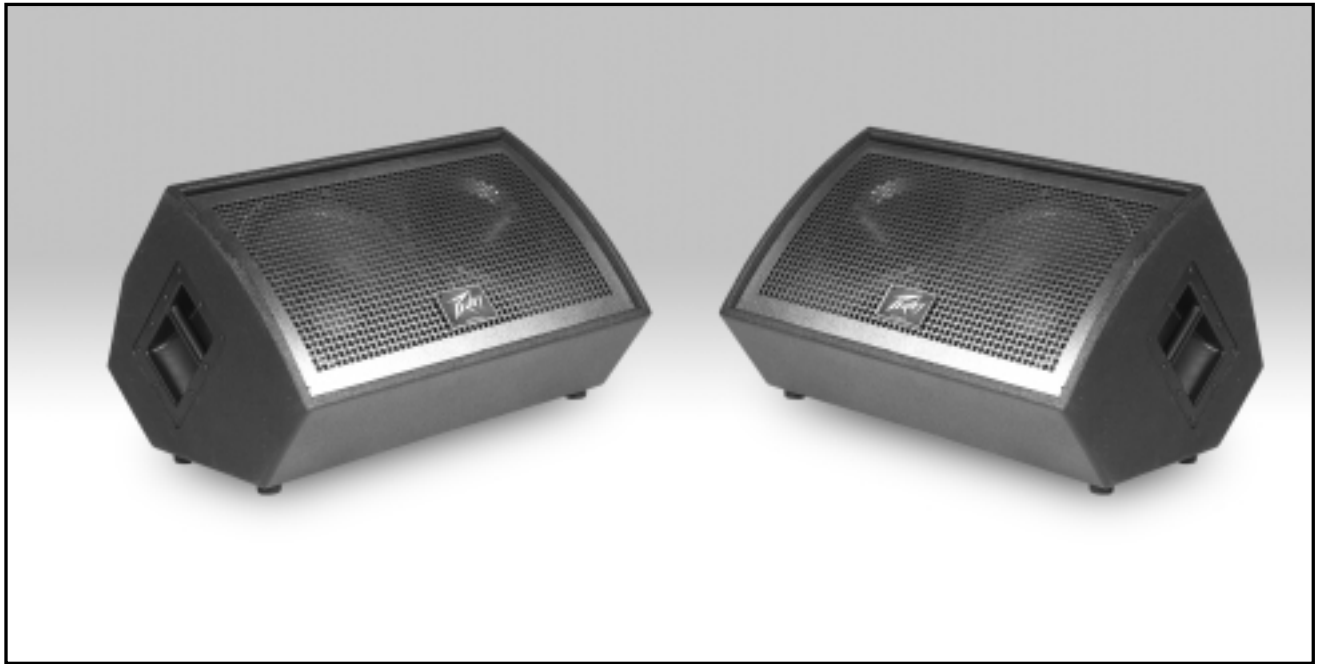


SPECIFICATIONS

QW™-Monitors



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

67 Hz - 18 kHz (± 3 dB)

Usable low frequency limit (-10 dB point):

55 Hz

Power handling:

Full range:

1,000 Watts continuous

2,000 Watts program

4,000 Watts peak

Low frequency section:

500 Watts continuous

1,000 Watts program

2,000 Watts peak

High frequency section:

100 Watts continuous

200 Watts program

400 Watts peak

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

Full range:

97.0 dB SPL, (2.83 Volts input)

Low frequency section:

98.6 dB SPL, (2.83 Volts input)

High frequency section:

108.4 dB SPL, (2.83 Volts input)

Maximum sound pressure level (1 meter):

Full range:

127.0 dB SPL continuous

133.0 dB SPL peak

Low frequency section:

125.6 dB SPL continuous

131.6 dB SPL peak

High frequency section:

128.4 dB SPL continuous

134.4 dB SPL peak

Transducer complement:

Low frequency section:

1x 15" woofer, vented

1508-8 Cu CP

High frequency section:

1x 1.6" exit/100 mm voice coil

compression driver on CD horn

44XT™ (without adapter) on a CH® 6

Box tuning frequency:

Low frequency section:

52 Hz

Harmonic distortion:

1% rated power

2nd Harmonic:

100 Hz: 0.81%

1 kHz: 0.36%

3rd Harmonic:

100 Hz: 0.21%

1 kHz: 0.12%

10% rated power

2nd Harmonic:

100 Hz: 2.00%

1 kHz: 0.96%

3rd Harmonic:

100 Hz: 0.62%

1 kHz: 0.19%

Crossover frequency (internal passive):

Low frequency - high frequency:

940 Hz

Recommended active crossover frequency region and slope:

Low frequency - high frequency:

1,000 Hz at 24 dB/octave

Time offset:

Low frequency: 0.00 ms

High frequency: 0.27 ms

Impedance (Z):

Full range:

Nominal: 8.0 Ohms

Minimum: 6.8 Ohms

Low Frequency:

Nominal: 8.0 Ohms

Minimum: 7.8 Ohms

High Frequency:

Nominal: 8.0 Ohms

Minimum: 9.7 Ohms



SPECIFICATIONS

Input connections:

Full Range: 3x Neutrik® NL4 (2x primary side, 1x secondary side)
Biamp Input: 1x Neutrik NL4 switching
Biamp Thru: 2x Neutrik NL4 (1x primary side, 1x secondary side)

Enclosure materials and finish:

3/4" plywood finished in black Hammer Head™ coating

Mounting provisions:

▲ This unit is not designed for overhead suspension

Dimensions (H x W x D):

17.75" x 29.75" x 21.25"
451 mm x 756 mm x 540 mm

Net weight:

85 lbs. (38.6 kg)

Features

- 2,000 Watts program, 4,000 Watts peak
- Very low power compression
- Pro Rider™ 15" woofer with 4" voice coil
- 44XT™ 4" titanium compression driver
- Low distortion at high SPL
- SoundGuard™ 44 high frequency driver protection

Description

The Q Wave™ Monitor is a two-way, full-range floor monitor loudspeaker system employing a newly-developed Pro Rider 15" woofer along with a 44XT compression driver and a CH®-6 conical constant directivity horn.

The QW-Monitor's shape helps reduce the build-up of standing waves inside the enclosure, which minimizes mid-bass and mid-range coloration. It is constructed of premium 18 mm poplar plywood and is covered with a tough, durable, black textured Hammer Head polyurethane coating. A 16-gauge, powder-coated, perforated metal grille covers the front of the system to protect the speakers from external damage.

The 15" Pro Rider woofer features a Kevlar® impregnated, water-resistant treated cone and dust cap for superior environmental stability. A 44XT 4" titanium diaphragm compression driver handles the high frequencies and features the Radialinear Planar Phase Correction System (US Patent 6,064,745), which provides smoother and extended high frequency response. Its CH-6 conical constant directivity horn provides an even 60° coverage in all directions.

QW™-Monitors

Amplitude Response (1W 1m On-Axis)

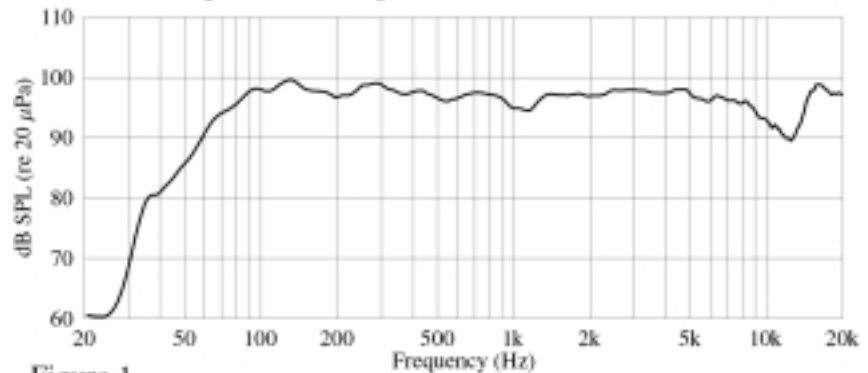


Figure 1

Impedance

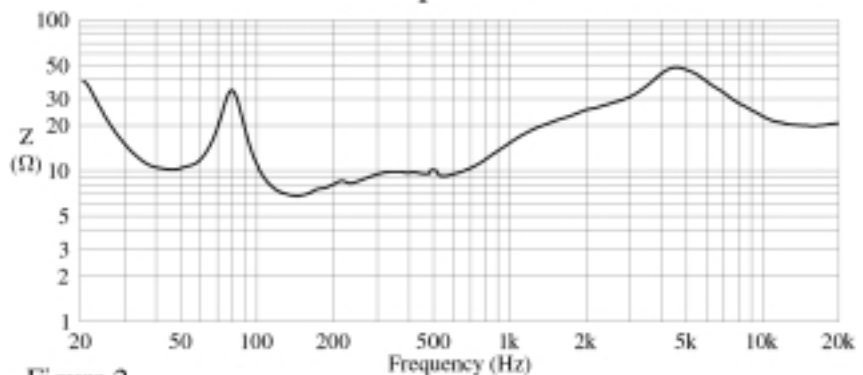


Figure 2

Harmonic Distortion : 10% Rated Power

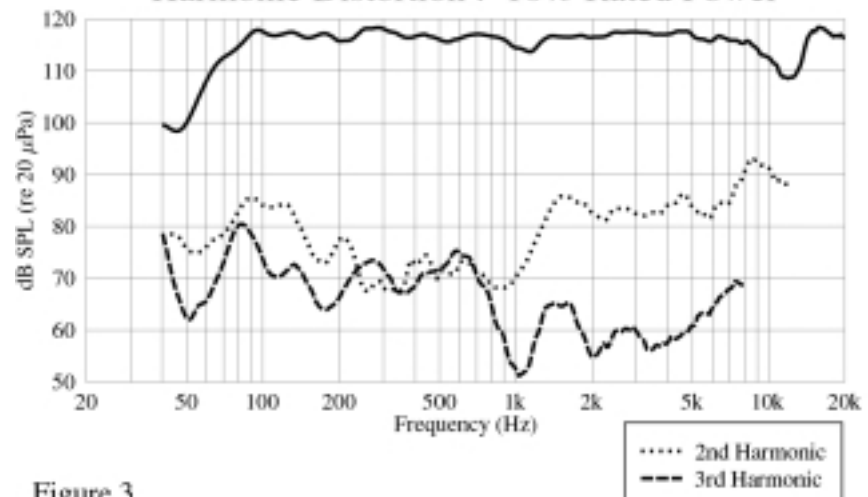


Figure 3

Full range input to the system is made via two four pin Neutrik jacks in parallel. A secondary input location is provided so that either side of the unit may be connected to the amplifier or another monitor used in parallel. A four pin Neutrik switching jack is provided for biamp input flexibility while maintaining superior signal integrity. The inclusion of a standard four pin Neutrik jack in parallel on the driver side of the biamp switching jack provides for daisy chaining to another cabinet when biamp operation is desired.

The internal passive crossover features the Sound Guard 44 high frequency driver protection circuit and an advanced topology crossover with high performance components to provide high power handling and reliability. This proprietary, high frequency driver protection circuitry provides long- and medium-term driver overload protection 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 result 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 the QW-Monitor.

Frequency response

This measurement determines how accurately a given unit reproduces an input signal. The frequency response of the QW-Monitor 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-Monitor combine to give a smooth frequency response from 67 Hz - 18 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 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.

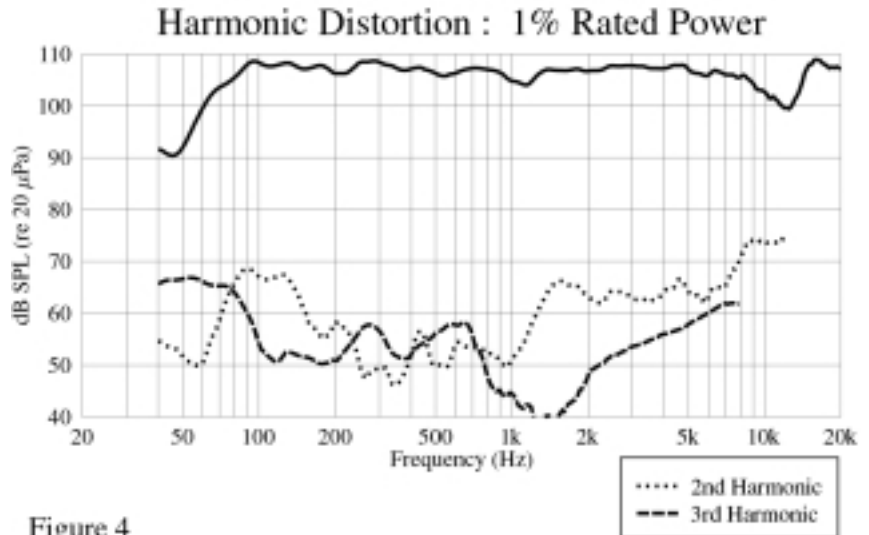


Figure 4

Harmonic distortion

Second and third harmonic distortions vs. frequency are plotted in figures 3 and 4 for two power levels, 10% of rated input power and either 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 down 40 dB from the fundamental is equivalent to 1% distortion.

Mounting

▲ **Caution:** This loudspeaker system is not designed for overhead suspension. An SA-1 stand adapter is included on the woofer side of the enclosure to facilitate stand-mounting for use in a public address application.


Architectural and engineering specifications

The loudspeaker system has an operating bandwidth of 67 Hz - 18 kHz, with a nominal output level of 97.0 dB when measured at a distance of 1 meter with an input of 1 Watt. Its nominal impedance is 8.0 Ohms. The QW Monitor's maximum continuous power handling is 1,000 Watts, with 2,000 Watts maximum program power and a peak power input of at least 4,000 Watts, plus a minimum amplifier headroom of 3 dB. The nominal radiation geometry is 60° in the horizontal plane and 60° in the vertical plane. The outside dimensions are 17.75" high by 29.75" wide by 21.25" deep. The QW-Monitor weighs 85 lbs.


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.

QW-Monitor Input Plates




QW™-M
MADE IN U.S.A.



BIAMP
IN

LOWS
1+ LF+
1- LF-


HIGHS
2+ HF+
2- HF-




BIAMP
THRU
ONLY

USE ONLY NEUTRIK® BRAND PLUGS FOR BIAMP IN

WARNING: THIS SPEAKER SYSTEM CAN PERMANENTLY DAMAGE HEARING! USE EXTREME CARE SETTING MAXIMUM LOUDNESS




PIN 1+
(+) POS.



PIN 1-
(-) NEG.

FULL RANGE INPUTS IN PARALLEL

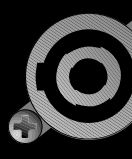
MAX POWER: 2,000 WATTS PROGRAM
IMPEDANCE: 8 OHMS WEIGHT: 80 LBS. (36.4kg)
HF DRIVER PROTECTED BY SOUNDGUARD™ 44
BUILT UNDER U.S. PATENT NO. 6,064,745



QW™-M
MADE IN U.S.A.

LOWS
1+ LF+
1- LF-


HIGHS
2+ HF+
2- HF-



BIAMP
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Features and specifications subject to change without notice.

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