

SPECIFICATIONS Impulse® 115



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

35 Hz to 1.5 kHz (± 3 dB)

Usable low frequency limit (-10 dB point):

27 Hz

Power handling:

800 Watts continuous
1,600 Watts program
3,200 Watts Peak

Sound pressure level, 1 Watt, 1 meter in an anechoic environment:

95 dB SPL (2.83 Volt input)

Maximum sound pressure level (1 meter):

124 dB SPL continuous
130 dB SPL peak

Transducer complement:

1 x 15" vented Low Rider® 15" subwoofer

Box tuning frequency:

40 Hz

Harmonic distortion:

1% rated power

Second harmonic:

100 Hz: 0.78%
500 Hz: 0.64%

Third harmonic:

100 Hz: 0.78%
500 Hz: 0.58%

10% rated power

Second harmonic:

100 Hz: 3.1%
500 Hz: 2.6%

Third harmonic:

100 Hz: 2.6%
500 Hz: 1.2%

Recommended active crossover frequency region and slope:

150 Hz at 18 dB/octave

Impedance (Z):

Nominal: 8.0 Ohms
Minimum: 7.3 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 and finish:

3/4" plywood finished with durable black HammerHead™ polyurethane coating

▲ Mounting provisions:

This unit is not designed for overhead suspension

Dimensions (H x W x D):

Front:

24.5" x 21.00" x 26.75"
622 mm x 533 mm x 679 mm

Net weight:

74 lbs. (33.6 kg)

Features:

- New Peavey Low Rider 15" subwoofer
- 1600 Watts of program power
- Extremely low frequency response down to 35 Hz
- Neutrik Speakon professional input connectors



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- Very compact design
- Built-in speaker stand-mount
- Black HammerHead™ polyurethane coating

Description

The Impulse 115 incorporates the new high powered Low Rider® 15" woofer and a new compact cabinet design. The Impulse 115 is a direct radiator subwoofer designed specifically for high-end pro audio users.

The new Low Rider 15" driver is a milestone in high powered subwoofer design. An incredible 1,600 Watt program rating and extra-long cone excursion provide amazingly clean, deep bass. This makes the Impulse 115 a superior choice for the bottom end of any high powered sound system, specifically large professional touring shows.

The Impulse 115 is unusually compact for its power handling, SPL output, distortion performance and bass extension. This is made possible by the specially designed Low Rider woofer.

This loudspeaker is well-braced and very stiff, as internal pressures produced by the Low Rider woofer can be very high. The vent design integrated into the enclosure includes a vertical brace to further increase enclosure stiffness.

The Impulse 115 vents a large area and a long path, allowing a large volume of air to move with very low resistance. This is important due to the huge air flow volumes that the Low Rider woofer can produce.

Its premium .720" plywood construction and tough, durable, black HammerHead polyurethane coating make this system

rugged and road-worthy. A 16-gauge powder-coated, perforated metal grille covers the front of the system to protect the speakers from external damage.

Inputs

This system features two four-pin Neutrik® jacks in parallel, an eight-pin Neutrik and a four-pin Neutrik thru jack, which provides bi-amping flexibility while maintaining superior signal integrity. The inclusion of a standard four-pin Neutrik jack in parallel allows for daisy-chaining to another cabinet when bi-amping.

Despite its compact dimensions, this system can put out extremely serious sound levels, 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 Impulse 115 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 Impulse 115 produces a smooth frequency response.

Power handling

There are many different approaches to power handling ratings. 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, 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 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. As shown on the graph, distortion is the difference between the fundamental signal (frequency response) and the desired harmonic. For example, a distortion curve that is down 40 dB from the fundamental is equivalent to 1% distortion.

Architectural and Engineering Specifications

The loudspeaker system shall have an operating bandwidth of 35 Hz to 1.5 kHz. The nominal output level shall be 95 dB when measured at a distance of 1 meter with an input of 1 Watt. The nominal impedance shall be 8 Ohms. The maximum continuous power handling shall be 800 Watts, with maximum program power at 1600 Watts; a peak power input of at least 3200 Watts; and a minimum amplifier headroom of 3 dB. The outside dimensions shall be 24.5" high by 21.00" wide by 26.75" deep. The weight shall be 74 lbs. The loudspeaker system shall be a model Impulse 115.

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.

Amplitude Response (1W 1m On-Axis)

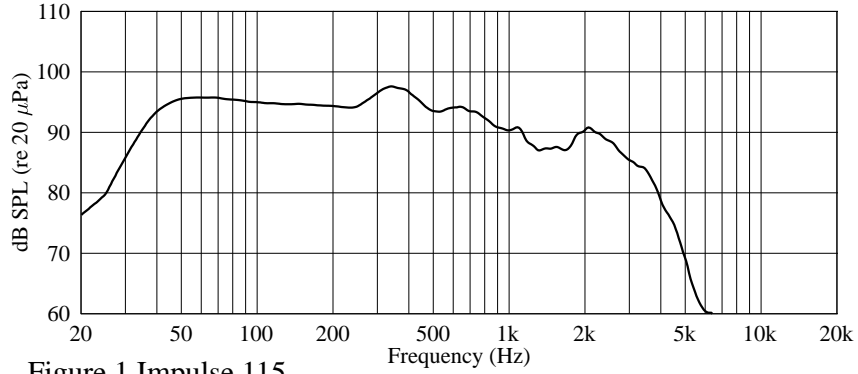


Figure 1 Impulse 115

Impedance

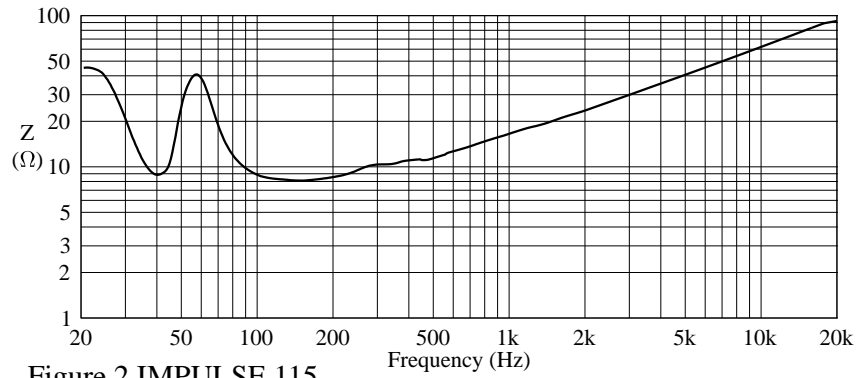


Figure 2 IMPULSE 115

Harmonic Distortion : 10% Rated Power

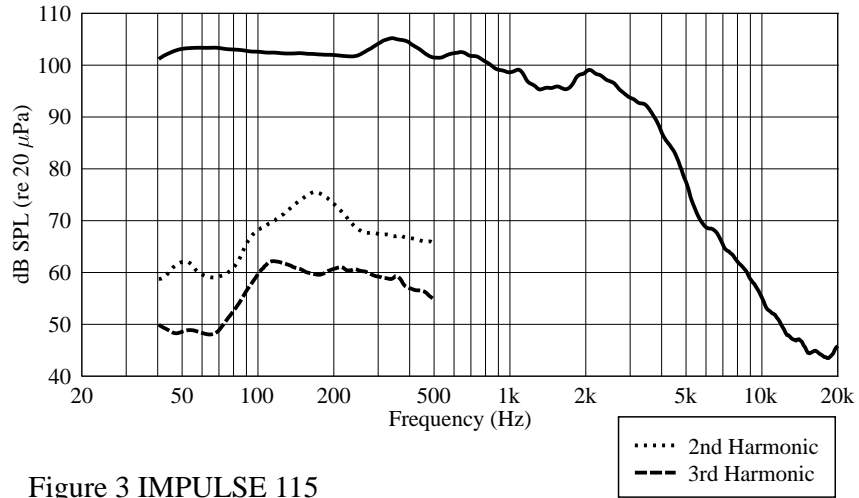


Figure 3 IMPULSE 115

Harmonic Distortion : 1% Rated Power

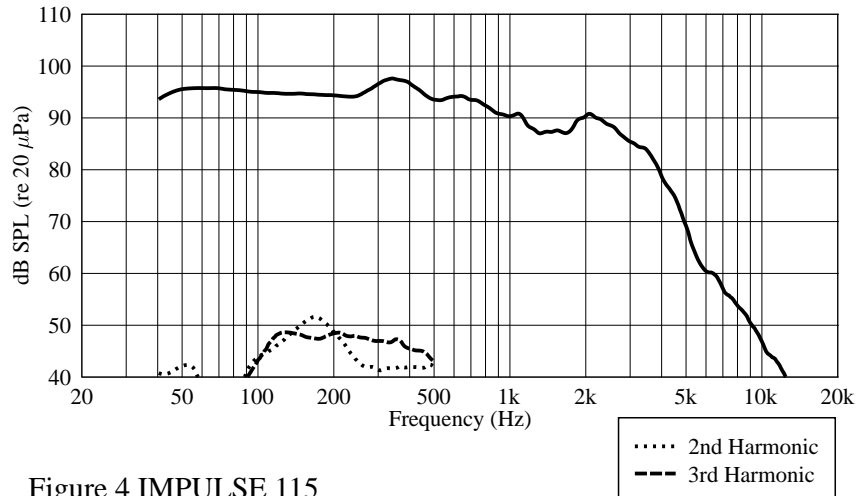


Figure 4 IMPULSE 115

Features and specifications subject to change without notice.

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