

QUARTZ-R INFRASUB™

APPLICATIONS

Stadium Sound Reinforcement
Auditorium Sound Reinforcement
House of Worship Sound Reinforcement

Nightclub Installations
Theatrical Sound Reinforcement

DESCRIPTION

The QUARTZ-R is a very high output concert Infra™ subwoofer system designed to minimize the space required to obtain extremely high level and high fidelity low frequency output. The QUARTZ-R provides perfectly flat response below 20 Hz when used in conjunction with the Infra™ Integrator. The QUARTZ-R includes casters, handles, feet and pole mount adapters for support of upper range speakers.



SPECIFICATIONS

System Type:

4 – Infrasub™ sealed chambers 3 ft³ each

Enclosure:

18 mm 13-ply birch plywood

Finish:

Black Ro Tex™ true water born environmental finish

Grille:

14 Gauge black powder coated perforated steel in a welded extruded aluminum frame

Low Frequency Components:

4 - EL18A 18" Transducers, Infra™ cone, 3" Voice coil, 120 oz Magnet

Input Connector:

2 - Input plates with dual Neutrik speakon

Internal Amplification:

Optional self powered

Hardware:

8 - Recessed handles
3 - 35 mm Pole mount adapters
16 - Machined aluminum speaker mounting clamps
4 - 3 1/2" Casters
4 - UHMW polyethylene feet

Fly Points Safe Working Load:

Optional F8 rigging points
300 lbs Upper most points

Crossover Type:

Requires external Infra™ integrator

Sensitivity:

99 dB SPL @ 45 Hz (2.83 V @ 1 m)

Frequency Response:

40 Hz to 250 Hz
18 Hz to 80 Hz ±3 dB with external Infra™ integrator

Low Frequency Limit:

8 Hz

Maximum Calculated Continuous Acoustic Output:

Half Space @ 1 Meter
10 Hz - 101 dB SPL
20 Hz - 115 dB SPL
40 Hz - 131 dB SPL
80 Hz - 135 dB SPL

Power Handling:

1600 W continuous (AES)
3200 W program

Recommended Amplifier Power:

1600 to 3200 W at rated impedance

Rated Impedance:

2 ohms total
2 Inputs, 4 ohms each

Polarity:

A positive asymmetrical signal applied to the + terminal will result in a positive asymmetrical acoustical pressure

Dimensions:

40" h x 30" w x 31" d
102 cm x 76 cm x 79 cm
Trapezoidal - 6 degree taper per side

Weight:

237 lbs
108 kg

Custom Finishes:

Optional custom finishes include white, unfinished ready to paint and outdoor weather treatment.

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QUARTZ-R INFRASUB™

ABOUT INFRASUB™ TECHNOLOGY

Almost all designs and specifications for subwoofer systems are fixated on the frequency response domain. However, the impression of power and quality of a loudspeaker is equally related to the time domain. The long wavelengths associated with low frequencies make this particularly true with subwoofers. Likewise, the maximum SPL is not a very reliable way to judge the impact of a subwoofer. A poor time domain performer will not have the same impact or natural musically connected sound as a Time-Aligned™ Infra™ system. The reason that an Infra™ subwoofer sounds dramatically better is because of their superior time domain performance, as well as their extended low frequency response. The Infra™ subwoofer maintains the bass energy in a tight packet, aligned with the upper range signal, providing a greater body impact and a seamless musical connection with the main loudspeakers. Conventional subwoofer designs perform poorly in the time domain because designers have used methods that sacrifice the phase response for more control over the frequency response (e.g.: steep low pass filter slopes, vented speaker enclosures, and narrow bandwidth systems). With the Infra™ technique, we do not degrade the phase response while extending the frequency response.

While the Infra™ dual Integrator does function as the system crossover, it does so without using a conventional low pass filter. The Infra™ integrator applies an inverse electrical response to the acoustical response of the Infra™ loudspeaker in its sealed enclosure. This provides the extended frequency response while maintaining the hi fidelity sound quality associated with a sealed box design. This design approach requires the most amplifier power to be used at the lowest frequency, thus we implement the Dynamic Filter™ technology to protect the system from the bottom up, affecting the lowest frequency first and leaving the middle and upper bass unaffected. The Dynamic Filter™ is a complimentary technology to the Infra™ system taking unique advantage of the Infra™ design approach, to implement a reliable protection scheme that is transparent and inaudible to the listener. When comparing a genuine Bag End® Infra™ loudspeaker system to any other, our technology and design is easy to hear and appreciate. The dramatic clarity, realism, and overall pleasant sound of an Infra™ system is well noted throughout the world.

ABOUT DYNAMIC FILTER™

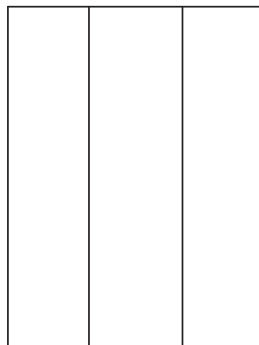
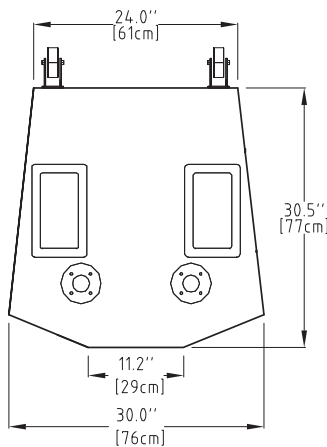
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scheme that is transparent and inaudible to the listener. Systems using the external rack mount Infra-MXB processor require an appropriate threshold adjustment that sets the amplifiers power and sensitivity to the Infra™ loudspeakers in use. When a system is asked to do more than it is capable of, or if an accidentally large signal is presented the threshold of the Dynamic Filter™ is crossed and the system protects itself from the bottom up by reducing the lowest frequencies first. Since the most power and excursion is always required at the lowest frequency, reducing the level of the lowest frequencies first avoids an overload, while at the same time the system is able to reproduce the middle and upper bass and leave the upper crossover region unaffected. This is a very natural and inaudible method to protect the system and unique to the Infra™ technology.

ABOUT OUR RO TEX™ FINISH

The durable Ro Tex™ finish is found on Bag End™ “R” series or Road cabinets. Ro Tex™ is a water base, environmentally safe finish that is made in Europe and is uniquely strong and long lasting. As it solidifies and attaches to the wooden cabinet it bonds with the wood to make a super hard permanent finish. It is lightly textured offering both an attractive and rugged finish.

DIMENSIONS



⊕ = Center of Gravity

