PQUARTZ-R INFRASUB™

SELF-POWERED

APPLICATIONS

Portable Sound Reinforcement
Portable DJ Systems
Theatrical Sound Reinforcement

DESCRIPTION

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

Our external rack mount Infra-MXB Integrator may be used to drive a line level Infra processed signal to one or more PQUARTZ-R systems.

SPECIFICATIONS

System Type:
4 - Infrasub™ sealed chambers 3 ft^3 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:
XLR 1/4" combo with XLR loop through

Internal Amplification:
2 - Minima One™

Input Impedance:
48K ohms

Input CAL Sensitivity:
+4 dBu

Maximum Continuous Amplifier Power:
2700 W

High Pass Filter:
Switchable: -6 dB @ 8 Hz; @ 50 Hz; @ 95 Hz

Overload Protection:
Internal Dynamic Filter™ protection

LED Indicators:
Green - On
Yellow - System limit
Red - System fault or sleep mode

Mains Voltage Requirements:
Auto sensing
Universal voltage range
88 V minimum to 270 V maximum

Mains Current Requirements:
9.2 A @ 120 V
4.6 A @ 240 V

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

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 dBSPL
20 Hz - 115 dBSPL
40 Hz - 131 dBSPL
80 Hz - 135 dBSPL

Polarity:
A positive asymmetrical signal applied to pin 2 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:
247 lbs
112 kg

Custom Finishes:
Optional custom finishes include white or unfinished ready to paint.

POQUARTZ-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.

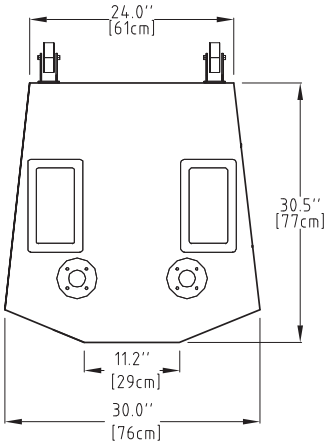
While the Infra™ dual Integrator does function as the system crossover, it does so without using a conventional low pass filter. The Infra™ integrator applies an inverse electrical response to the acoustical response of the Infra™ loudspeaker in its sealed enclosure. This provides the extended frequency 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.

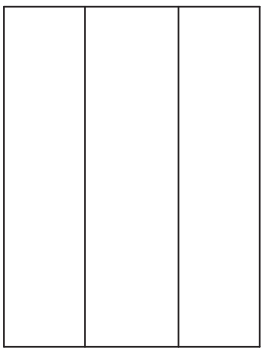
ABOUT MINIMA ONE™

The Minima One™ is both a high fidelity and a high efficiency amplifier. With efficiency well over 80%, the Minima One™ provides more power to the loudspeakers and creates less heat in the amplifier. In real world applications there is practically no heat emitted from the amplifier and thus it requires no cooling fan.

Incorporating patented technology the comparison circuit of the Minima One™ corrects every single cycle to drive error to zero at the end of each cycle. On average, every 4 microseconds, the one cycle modulator transforms and amplifies the input signal into the ideal natural pulse width modulation. Switching at 250 kHz with the single cycle error correction insures extremely low distortion and high reliability. The power factor corrected AC power input, automatically and continuously adapts to any voltage between 88 and 270 volts. The Minima One™ is convenient and stable to operate on any power grid in the world.

DIMENSIONS





⊕ = Center of Gravity