



SYSTEM COMPONENTS

Enclosure:

18 mm 13-ply birch plywood

Low Frequency Transducers:

4 - 18" INFRA cone
3" Voice coil
120 oz. Magnet

Input Connectors:

We will put whatever connectors you want on these.

Grille:

14 Gauge black powder coated perforated steel in an extruded aluminum frame with weather seal

Standard Hardware:

8 - Recessed handles
16 - Machined aluminum speaker mounting clamps
4 - UHMW polyethylene feet
Heavy duty L-track rails, top and bottom, with internal structural connection.
Removeable grille aperture cover.

ACOUSTIC AND ELECTRICAL

System Type:

Infrasub 4 - sealed chambers (2.7 ft³ each)

Impedance:

Two 4 Ω inputs

Crossover Network:

Requires INFRA Integrator
Compatible w/ ELFTM integrator

Recommended Crossover Frequency:

80 Hz

Frequency Response:

18 Hz to 65 Hz ±2 dB
(2π Steradians, with INFRA Integrator)

Sensitivity:

97 dB SPL @ 45 Hz (1W @ 1m)
(for additional information, see INFRA Speaker Sensitivity Technical Note)

Power Handling:

1600 W continuous program

PHYSICAL

Finish:

Black textured paint

Dimensions:

42"h x 27.375"w x 35.5"d
107 cm x 70 cm x 90 cm
Trapezoidal, 10° taper per side

Weight:

280 lbs.
127 kg

APPLICATIONS:

Concert PA systems**Auditorium Reinforcement**

ONYX-R The ONYX-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 ONYX-R provides perfectly flat response down below 20 Hz when used in conjunction with the INFRA Integrator. The ONYX-R includes handles, a protective hard cover for the grille aperture, and also top and bottom heavy duty dual L-track rigging attachment rails. It is designed to integrate into existing touring sound systems, specifically those composed of the EAW 850 and 853 series.

ABOUT INFRASUB TECHNOLOGY Almost all specifications for subwoofer systems are fixated on the frequency response domain. However, the impression of power and quality is equally related to the time domain performance of a system. Because of the long wavelengths of low frequencies, this is 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 sound as a Time-Aligned™ INFRA system.

The reason that INFRA technology sounds dramatically better than the others is because of their superior time domain performance. 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 sub designs perform so 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 low pass filter. Adding a low pass filter, analog or digital, will have a degrading effect on the time domain performance of the INFRA subwoofer. A low pass filter adds signal delay to the sound which varies with frequency. Also, narrowing the pass band increases the influence of the rolloff on both ends of the subwoofer spectrum. The result is the smearing of the arrival times of the low frequency sound components, changing the timbre and downgrading the impact of transient sounds.

The Bag End INFRA subwoofers are designed as no-compromise, high fidelity reproduction systems. We believe they are the finest subs available, regardless of price.

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