

**SYSTEM COMPONENTS****Enclosure:**

18 mm 13-ply birch plywood

**Low Frequency Transducers:**

2 - 18" INFRA cone  
3" Voice coil  
120 oz. Magnet

**Input Connectors:**

Cinch 142 screw terminal  
barrier strip

**Grille:**

14 Gauge black vinyl coated  
perforated steel

**Standard Hardware:**

8 - Machined aluminum speaker  
mounting clamps

**Optional Hardware:**

Rigging points

**ACOUSTIC AND ELECTRICAL****System Type:**

INFRA 2 - Sealed chambers  
(3 ft<sup>3</sup> each)

**Impedance:**

4 Ω

**Crossover Network:**

Requires INFRA Integrator

**Frequency Response:**

8 Hz to 95 Hz ±3 dB  
(2π Steradians, with  
8 Hertz Integrator)

**Sensitivity:**

100 dB SPL @ 80 Hz  
(1W @ 1m) (for additional  
information, see INFRASpeaker  
Sensitivity Technical Note)

**Power Handling:**

800 W continuous sine wave  
800 W instantaneous peak

**PHYSICAL****Finish:**

Black Textured Finish

**Dimensions:**

15" h x 38" w x 30" d  
39 cm x 97 cm x 77 cm

**Weight:**

126 lbs.  
58 kg

**Shipping Dimensions:**

17" x 40" x 32"  
44 cm x 102 cm x 82 cm

**Shipping Weight:**

138 lbs.  
63 kg

**APPLICATIONS:**

House of Worship

5.1 Digital Format Subwoofer

Recording Studio

PA System Installations

Home Theater

Discotheque

**D18E-AD** The D18E-AD is a very high output INFRA subwoofer system designed to provide high fidelity extended low frequency audio reproduction from a relatively small enclosure. The D18E-AD provides perfectly flat response down to 8 Hertz when used in conjunction with the 8 Hertz Integrator. Designed for permanent installation, the D18E-AD offers a flat black painted finish and a black coated steel grille.

**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 correct 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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