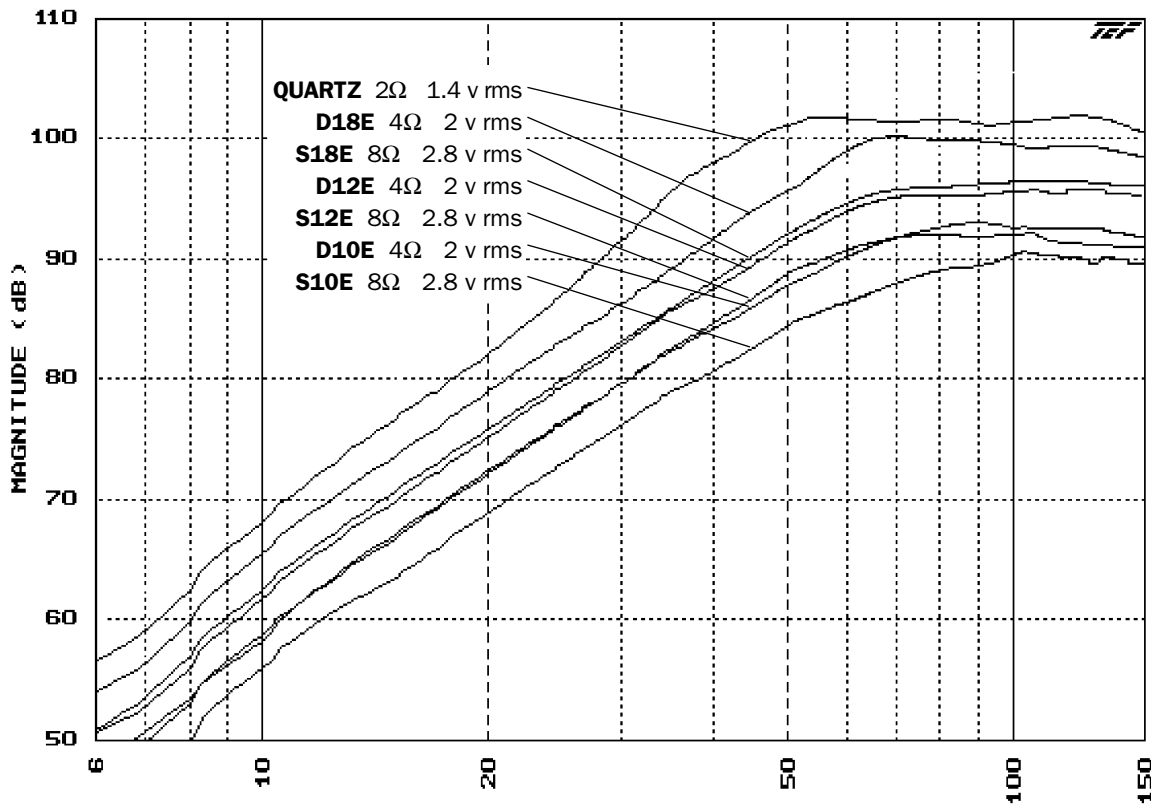


T E C H N I C A L N O T E



The measurement was made on a Techtron TEF20 analyzer with SoundLab TDS software. The test signal is a 15 second swept sine wave. The microphone is a Bruel & Kaer 4007 and was placed on the woofer axis at 1 meter from the baffle. The measurement has a 2 Hz resolution and there is no smoothing applied to the display.

Sensitivity ratings of low frequency loudspeakers are only really useful when the measurement frequency is also known. We have found it useful for design purposes to refer to the data for the full operating bandwidth of all the Bag End INFRAspeaker enclosures. The graph above shows the sound pressure levels at a distance of 1 meter with 1 Watt of electrical power.

These are actual measurements taken in a half space environment.

Bag End INFRAspeaker systems are optimized to have the same operating range, regardless of the quantity of drivers or their diameter. Unlike conventional subwoofers, Infrasubs operate below their resonant frequency: other subs use resonance as the low frequency cut-off point, but **Infrasubs use the resonance as the high frequency cut-off point.**

The Bag End systems have been designed to all have approximately the same resonant frequency, thus,

the same high frequency rolloff point. The low frequency cutoff is set with a hi pass filter in the INFRAspeaker processor.

The **Dynamic Filter** circuit is a complimentary technology to the INFRAspeaker. Set to the proper threshold, it insures that unexpectedly large signals will not overload the system resulting in possible damage or audible distortion. This allows high level operation close to the maximum system capabilities without fear of accidental overload. The Dynamic Filter is not a band limiter. It dynamically reduces the low frequency extension.

**BAG END Loudspeakers**  
22272 Pepper Road  
Barrington, Illinois  
60010 USA  
Voice 847 382 4550  
Fax 847 382 4551  
[www.bagend.com](http://www.bagend.com)

