

Rythmik Audio | Articulate bass for the discerning audiophile

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DS800 CI - Direct Servo subwoofer

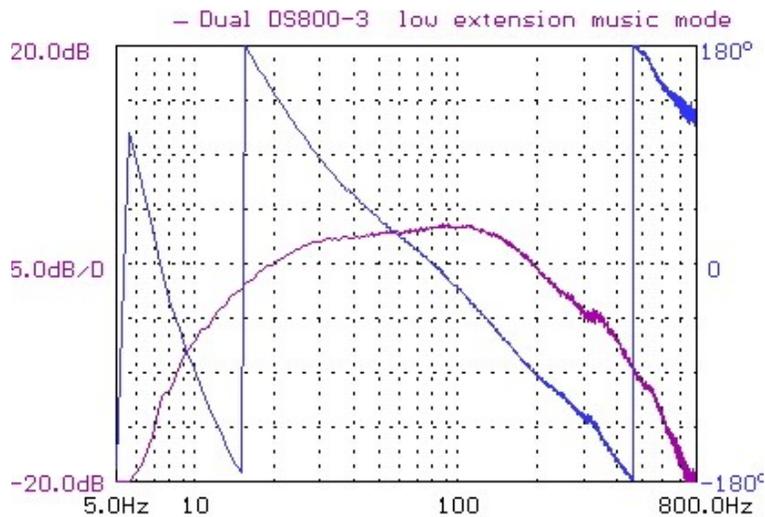
dual 8" sealed sub for custom installations

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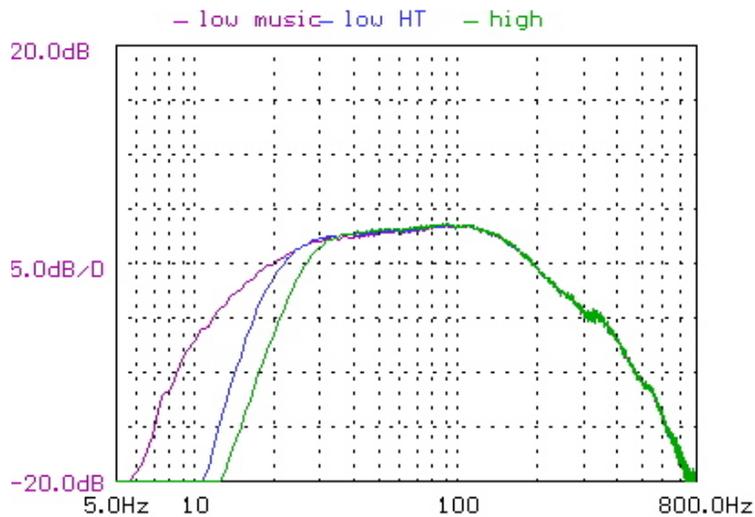


Performance

Unlike conventional subwoofers, the frequency response remains flat at all output levels until the output limits have been reached. Without Direct Servo, a flat response will only be achieved at low output levels.



There are 3 bass extension modes: low music, low HT, and high. In the following is the comparison of all 3 modes.



Recommended: 1.4cu ft sealed enclosure for two DS800-3 drivers

Component selection

We carefully select all components for performance and value. We have selected components that will return the best value. Our class D modules are from renown Hypex Ucd series. The MILLS current sensing resistors and the op amps are selected based on their sonic benefits. Our toroidal transformers allow us to offer 120V/240V with equal wattage output on the same amplifier.

Flexible design

All of our subwoofers feature unique bass extension controls which are not normally provided on subwoofers. This enables the user to customize the output and extension to achieve the best compromise in any room. Most subwoofers neglect to provide bass extension control, and the result is that dynamic headroom is compromised. [► More info](#)

Sub crossover filter

(12 dB or 24 dB low pass roll-off)

A lot of audiophiles like to run their front speakers full-range. The objective is to avoid any signal degradation on the front speakers. Our recommendation is to have a simple RC network as shown in the FAQ page to relieve the bass burden from the front speakers. In either case, a 24 dB low pass roll-off version of the subwoofer is recommended. Phase alignment is also very important. One can either use the phase control on the plate amps, or the delay time adjustment on HT receiver to dial in the phase alignment. The phase control on the plate amp is only for phase lag adjustment on the subwoofer. The delay time adjustment on the HT receiver can achieve both phase lead and phase lag adjustment on the subwoofer. As a general rule of thumb*, the sound wavelength of 50 Hz is 20ft. A full wave is 360 degrees. Therefore, if we put the physical distance in the delay time adjustment menu 5 ft further (or closer) than the physical distance is, the HT receiver will put a 90 degrees phase lead (lag).

*Actual value varies with ambient air temperature

Customized Bass extension

This kit features a unique bass extension control, shown below.



The bass extension control enables the user to customize the frequency response of the low end for the best trade-off between output and extension. If set to low music, bass below 18 Hz will be filtered. The damping factor of this mode is 0.5 for the best time domain response. However, the disadvantage is slower attenuation of subsonic signals. For HT application, we recommend low-HT mode which incorporates a 3rd order highpass filter to filter out subsonic signals below 20hz. High extension setting is recommended for application where longer playback time and lower power consumption is required.

Voltage Selection

Correct voltage must be selected before use. Voltage switch is shown below.



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