

834 Studio Subwoofer



The 834 Studio Subwoofer System consists of a matched pair of vented cabinets each containing a single MS-18 cone loudspeaker and network. The system is designed to reproduce frequencies below 100Hz, thereby extending the power bandwidth of the Meyer Sound 833 Studio Reference Monitor System. The combined 833/834 Studio Reference Monitor System is capable of output levels exceeding 130dB SPL while maintaining a frequency response of 30Hz to 18kHz.

The 833 Studio Reference Monitor System exhibits extreme linearity, excellent imaging and low distortion. The addition of the 834 Studio Subwoofer preserves these essential features by extending the power bandwidth of the system and enhancing the system's ability to accurately reproduce signals containing significant low-frequency information at high SPLs. The 834 Studio Subwoofer System is recommended to users of the 833 Studio Reference Monitor System who require accurate reproduction at high listening levels in large rooms.

Features

130dB SPL

Frequency range 30-100Hz

Needs no additional amplifier¹

Low distortion at high SPLs

Applications

Critical monitoring at high SPLs

Accurate monitoring of synthesized sounds

Extends the 833 System power bandwidth without affecting frequency response

¹System amplifier must be capable of driving into 4 ohms when 834 is connected in parallel with 833 Studio Reference Monitor.



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Specifications

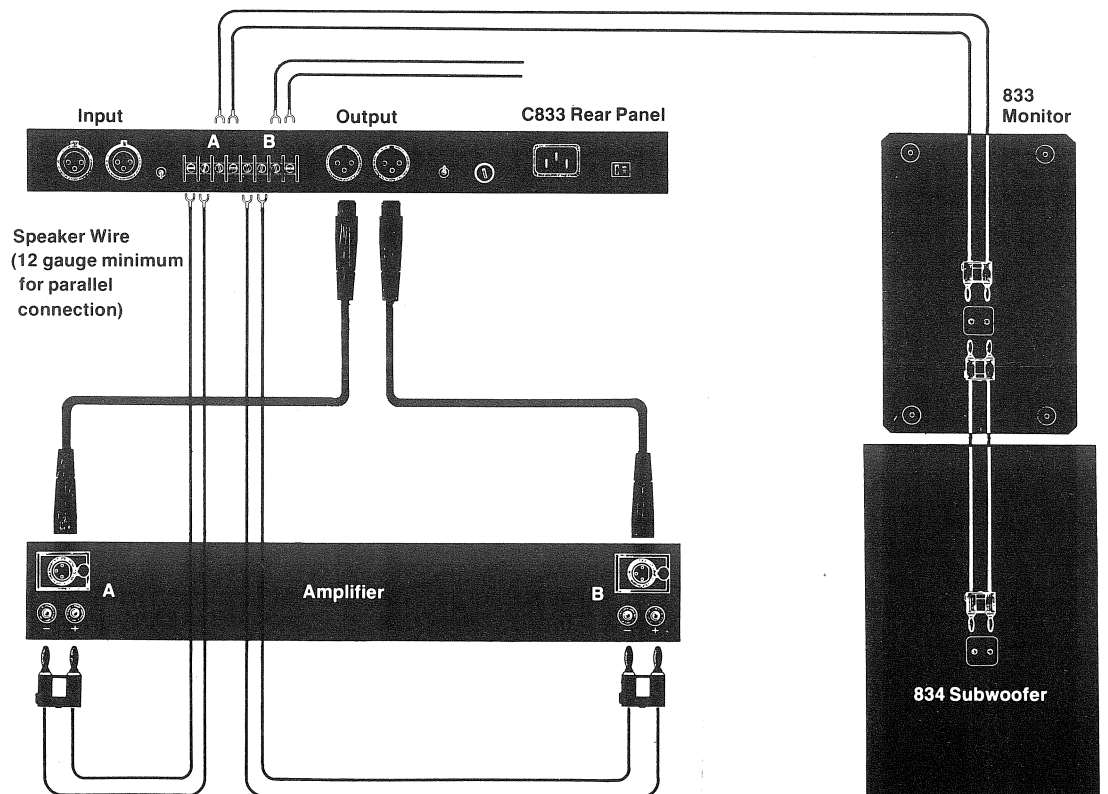
Acoustical—833/834 Studio Reference Monitor System

Frequency Response ¹	30-18kHz \pm 4dB
Time response	\pm 350 μ sec 100-20kHz
	\pm 25 μ sec 2,000-20kHz
Maximum SPL ²	
Continuous	120dB
Peak	130dB
834 Loudspeaker	
Low Frequency Driver	MS-18
Network	Low-pass filter, DC Protection
Enclosure	8 cu. ft., vented, heavily braced MDF
Finish	Satin black high-pressure laminate
Physical Dimensions	24 $\frac{1}{8}$ "W x 20 $\frac{1}{8}$ "D x 38 $\frac{1}{8}$ "H
Weight	127 lbs. (58 kg)
Decorative Grill	Acoustically transparent material on removable frame
Connectors	5-way, deep binding-post

Notes:

1. Measured 1 meter on-axis, half-space conditions, pink noise input, in third-octave bands.
2. Weighted noise input, loudspeaker driven by 250 watt/channel (8 ohm rating) amplifier.

Connecting the 834 Studio Subwoofer. Parallel Connection



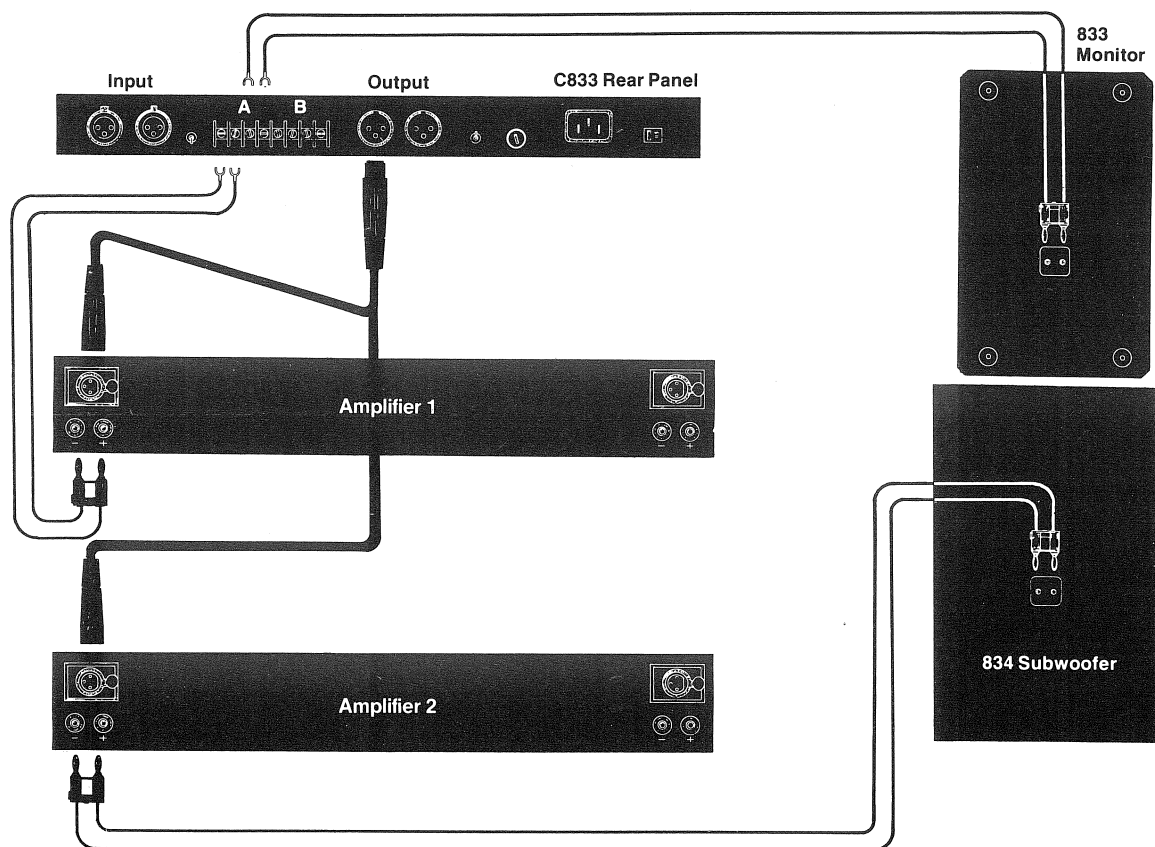
The C833 Control Electronics Unit supplied with the 833 System contains the necessary circuitry to compensate for the additional acoustic output realized when using the 834 Studio Subwoofer System. A rear panel switch on the C833

inserts a complementary phase and amplitude equalization circuit to compensate for the increased efficiency of the 834 subwoofers. Insertion of this circuit is indicated on the front panel of the C833 by an LED marked Sub.

The 834 subwoofers are each connected in parallel with their respective 833 Studio Reference Monitors, thus presenting a load of 4 ohms to the power amplifier. No additional amplification is necessary, provided the system amplifier is capable of driving a 4 ohm load. If the system amplifier

cannot safely drive a 4 ohm load, then an additional stereo amplifier (with identical gain) should be used for the 834 subwoofers. No additional control electronics are necessary in either configuration, as the C833 provides the necessary drive signal for both amplifiers.

Connecting the 834 Studio Subwoofer. Separate Amplifier



834 Studio Subwoofer

Architectural and Engineering Specifications

The loudspeaker shall be of the vented, direct radiator type and shall have an internal volume of eight cubic feet. The cabinet shall be tuned to 30Hz and shall contain one 18" cone driver and a low-pass filter network for crossover and DC protection.

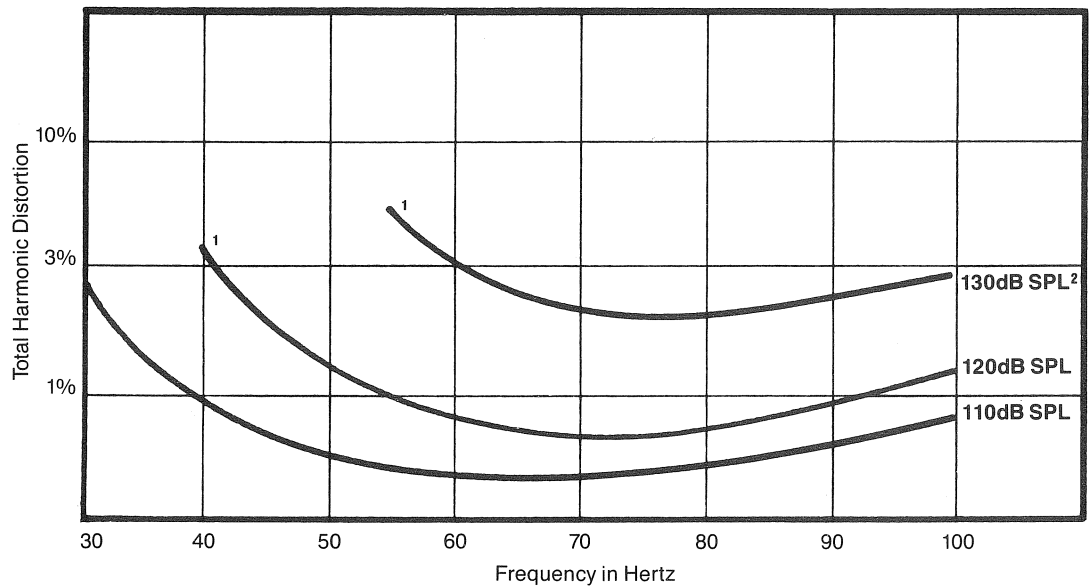
The loudspeaker, when driven by an amplifier capable of delivering 200 watts into an 8 ohm load, shall be capable of reproducing all frequencies between 40Hz and 100Hz with less than 3% Total Harmonic Distortion at 110dB SPL, less

than 10% THD at 120dB SPL. All measurements shall be made in quarter-space conditions (wall/floor junction, outdoors) at 1 meter.

The weight of the loudspeaker shall be 127 lbs.

The dimensions of the loudspeaker shall be 24 $\frac{1}{8}$ "W x 20 $\frac{1}{8}$ "D x 38 $\frac{1}{8}$ "H.

The loudspeaker shall be called the Meyer Sound 834 Studio Subwoofer.



Typical distortion figures for the 834 Studio Subwoofer at high SPLs

¹Low frequency response at high SPLs is controlled by the C833 Control Electronics Unit

²Amplifier capable of 300 watts into 8 ohms

All measurements made at 1 meter, one-quarter space conditions (wall/floor junction, outdoors).