



GREAT PLAINS AUDIO

MODEL 515-8/16LF

HIGH-PERFORMANCE LOW-FREQUENCY LOUDSPEAKER

*"The Legacy Lives On"*TM



Great Plains Audio is pleased to offer a variation on one of our most popular low frequency loudspeakers, the **GPA Model 515-LF Series High-Performance Low-Frequency Loudspeaker**. Designed specifically to provide high quality reproduction in sound reinforcement systems and monitoring systems, as well as high-quality home theatre applications *Great Plains Audio's Model 515-LF Series High-Performance Loudspeakers* are the unit of choice where superb clarity, natural sound quality, high efficiency, excellent frequency response, low distortion, and unsurpassed linearity are a necessity.

Similar in performance to our *Model 515-C* series loudspeakers, the **Model 515-LF series** speakers are capable of higher output than the C-series with minimal distortion. Unlike our Model 515-G series, which is designed exclusively for use in bass horns, the Model 515-LF's rear vented magnetic assembly enables it to operate extremely well in a variety of different enclosures, including direct radiator cabinets, bass horns of all types, as well as sealed enclosures. The Model 515-LF's exceptional linearity and low distortion also lends itself well to loudspeaker monitor systems.

❑ **Digital Ready? OF COURSE!**

The amount of low frequency program material found in today's digital recordings is much greater than in other recorded media. When a loudspeaker system accurately reproduces such sounds, the result is impressive. When it does not, the results can often be unbearable to listen to. Most manufacturers, attempting to make their speakers "digital ready", realize that substantial changes must be made in their speaker designs if they are going to be able to keep up with the audio found in the digital world of today. Large, heavy voice coils, inarticulate suspension systems, cones that weigh far too much to be able to reproduce the middle of the audio spectrum accurately - these are but a few of the compromises that must be made if ordinary speakers are going to be able to function in the digital world. In addition, speakers of this type require massive amounts of amplifier power to operate. Not only that, but most of these types of designs incorporate voice coils that "overhang" outside of the magnetic field, a method of construction that results in a significant loss of control of cone movement, greatly reducing the ability of the loudspeaker to articulate sounds with the precision demanded by today's listeners and performers.

Great Plains Audio's 515-LF Series High-Performance Loudspeakers don't rely on such tactics in order to be able to respond to the demands of digital music and sound effects. Instead, they use a lightweight cone, high-compliance suspension, and the low-frequency voice coil remains in the magnetic gap at all times. When used in a properly designed enclosure, they exhibit tighter bass, cleaner sound, and more accurate low-frequency sound reproduction than virtually any other system on the market today.

The **GPA 515-LF series** uses a massive 4.4-pound FerriteV magnet, which provides 14,750 gauss of flux density, an edgewound copper ribbon voice coil, a very light cone assembly, and a low distortion cloth suspension, which enables them to provide extended bass response, extremely high linearity, and amazing efficiency. ■

MODEL 515-8/16LF LOW-FREQUENCY LOUDSPEAKER

PERFORMANCE SPECIFICATIONS -

Frequency Response*: 20-1000 Hz

Power Handling:** 125 watts

Pressure Sensitivity*:**

Enclosure:	210A/211	106 dB	(Uses 2-515-LF's)
	410	108 dB	(Uses 4-515-LF's)
	612C	99 dB	(Uses 1-515-LF)
	817A	105 dB	(Uses 2-515-LF's)
	816A	101.5 dB	(Uses 1-515-LF)
	828A	102 dB	(Uses 1-515-LF)

Minimum Impedance: 515-8LF = 8 ohms
515-16LF = 16 ohms

Input Connections: Large push-button type terminals.

Thiele-Small Parameters:

X_{max} (inch)	0.20
R_e (ohms)	6.70
V_d (cu. in.)	23.00
F_s (Hz)	27.40
V_{as} (cu. ft.)	16.60
Ref. Eff (%)	6.70
Q_{ts}	0.255
Q_{ms}	11.63
Q_{es}	0.261

Magnet Type: FerriteV

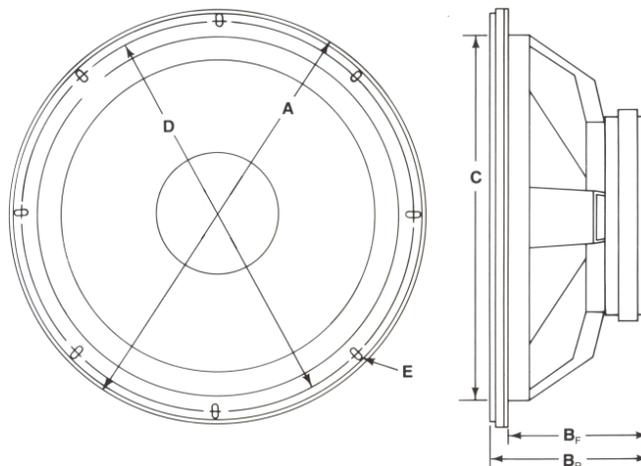
Magnet Weight: 4.4 pounds

Flux Density: 14,750 Gauss

Net Weight: 26 pounds.

Finish: Black powder coat paint.

Loudspeaker Mounting Dimensions:



- A =** Loudspeaker Diameter: 16"
- B_F =** Depth When Front Mounted: 6 1/8"
- B_R =** Depth When Rear Mounted: 6 15/16"
- C =** Baffle Opening Diameter: 14 1/8"
- D =** Bolt Circle Diameter: 15"
- E =** Bolt Hole Slots: 1/4" x 3/4" (8 slots spaced 45° apart)

NOTES:

- * Low frequency limit is the 3 dB down point using the particular enclosure and the Thiele/Small parameters of the loudspeaker.
- ** AES power rating (measured Power = E²/R, using Pink Noise with a crest factor of 6 dB and a band limit of 60-600 Hz).
- *** Measured in the free-field at 4' on-axis with one watt (Power = E²/R), of band-limited pink noise from 100 to 1000 Hz.



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