

# 1215A Portable Low-Frequency Folded Horn 1225A Portable High-Frequency Multicell System

1215A  
1225A



ALTEC's 1215A is a low-frequency, musical instrument speaker system matching an ALTEC 421-8H 15-inch, high-power low-frequency musical instrument loudspeaker with a specially designed, extended folded horn. The 421-8H speaker has a 3-inch edge-wound voice coil of copper ribbon, a powerful magnet and a rigid cast aluminum frame to reproduce bass and mid-bass sounds with high efficiency. The cone suspension has optimum compliance and the speaker is sealed against dust and dirt. The system is rated to handle up to 150 watts of continuous power. The enclosure includes steel front legs with rubber feet, rear roll-around casters and tow-bar handle.

Designed to meet the high performance standards of professional musicians, the ALTEC 1225A system is rated to handle up to 100 watts of continuous power. All components of the 1225A system are carefully matched:

805B Multicellular Horn . . . 8 cells with exponential expansion. Operates from 800 Hz to beyond audibility.

292-8A High-Frequency Driver . . . exceptionally high power-handling capacity and efficiency. Smooth response from 800 Hz to 8 kHz. Rugged voice coil and diaphragm assembly.

N809-8A Dividing Network . . . precision two-section network with HF attenuation control, 800 Hz crossover and 12 dB/octave slope. Two phone jack paralleled inputs.

The 1215A and 1225A are designed for use together as a system, but each may be used independently with other models. When used together, the 1225A is stacked on top of the 1215A. System input is through an N809-8A 800 Hz passive crossover network located in the side of the 1225A. Low-frequency connection is made to the 1215A through standard phone plug patching panels located in the rear of the enclosure. The 1225A may be used with a separately amplified high-frequency signal. This independent application is made through a phone plug that disconnects the N809-8A Dividing Network and passes the signal through a separate network which provides rolloff below 600 Hz. Additional units may be paralleled with both the 1215A and 1225A through phone plug connections.

The 1215A and 1225A are portable. Each system enclosure has a resilient epoxy spatter finish. The 1225A system includes a removable latching front cover. Standard phone jacks for cable connections and a 50-foot, 2-conductor cable accessory for each system make handling and setup easy.

Detailed specifications and descriptions of 1215A and 1225A system components can be obtained from their respective ALTEC catalog sheets and brochures.

**ALTEC**<sup>®</sup>

A DIVISION OF ALTEC CORPORATION

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# ALTEC 1215A

## 1215A SPECIFICATIONS

- Type:** Extended folded horn low-frequency speaker system
- Power Rating:** 150 watts
- Frequency Response:** 35 Hz to 1000 Hz (see Figure 1)
- Pressure Sensitivity:** 106 dB SPL measured at 4' on axis with 1 watt input of pink noise from 100 Hz to 1 kHz (Ref.: 0.0002 dyne/cm<sup>2</sup>). Equal to EIA rating of 59 dB SPL at 30' with 1 milliwatt input.
- 98 dB SPL measured at 10' on axis with 1 watt input of pink noise from 100 Hz to 1 kHz (Ref.: 0.0002 dyne/cm<sup>2</sup>)
- Input Impedance:** 8 ohms
- Input Connection:** One standard 1/4" phone jack
- Output Connection:** One standard 1/4" phone jack
- Enclosure:** Extended folded horn type. Sturdy 3/4" plywood construction. Fitted with rubber feet on steel front legs, rear roll-around casters, and tow-bar handle.
- Dimensions:** 48" H x 28" W x 23 3/4" D  
(121.92 cm H x 71.12 cm W x 60.33 cm D)
- Weight:** 110 pounds (49.81 kg)
- Components:** 1 ALTEC 421-8H LF Musical Instrument Loudspeaker  
1 ALTEC 50', 2-conductor cable with standard phone plug on each end

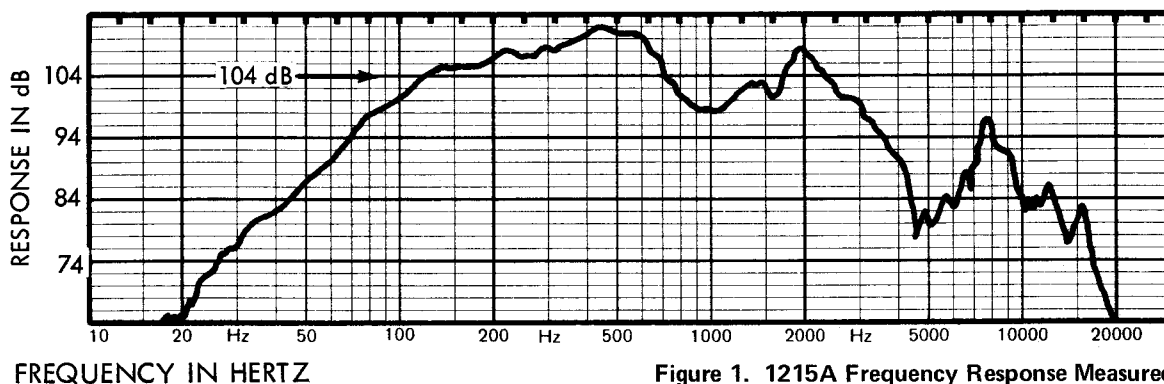


Figure 1. 1215A Frequency Response Measured at 4' on Axis with 1 Watt Input

# ALTEC 1225A

## 1225A SPECIFICATIONS

<b>Type:</b>	Portable multicellular speaker system
<b>Power Rating:</b>	100 watts
<b>Frequency Range:</b>	300 Hz to 8000 Hz (see Figure 2)
<b>Pressure Sensitivity:</b>	108 dB SPL measured at 4' on axis with 1 watt input of pink noise from 500 Hz to 10 kHz (Ref.: 0.0002 dyne/cm <sup>2</sup> ). Equal to EIA rating of 61 dB SPL at 30' with 1 milliwatt input. 100 dB SPL measured at 10' on axis with 1 watt input of pink noise from 500 Hz to 10 kHz (Ref.: 0.0002 dyne/cm <sup>2</sup> ).
<b>Crossover Frequency:</b>	800 Hz with 12 dB/octave slope
<b>Input Impedance:</b>	8 ohms
<b>Distribution Pattern:</b>	40° vertical x 80° horizontal
<b>High-Frequency Shelving:</b>	'L' pad. Continuously variable from 0 dB to approximately -20 dB
<b>Input Connection:</b>	One standard ¼" phone jack
<b>Output Connection:</b>	One standard ¼" phone jack
<b>Enclosure:</b>	Sturdy ¾" plywood construction with removable latching front cover and recessed die-cast handles
<b>Dimensions:</b>	19¾" H x 28" W x 29½" D (50.17 cm H x 71.12 cm W x 74.93 cm D)
<b>Weight:</b>	160 pounds (72.45 kg)
<b>Finish:</b>	Resilient dark gray epoxy spatter
<b>Components:</b>	1 ALTEC 292-8A High-Frequency Driver 1 ALTEC 805B Multicellular Horn 1 ALTEC N809-8A Dividing Network 1 ALTEC protective network for HF driver, 12 dB/octave rolloff below 600 Hz 1 ALTEC 50', 2-conductor cable with standard phone plug on each end

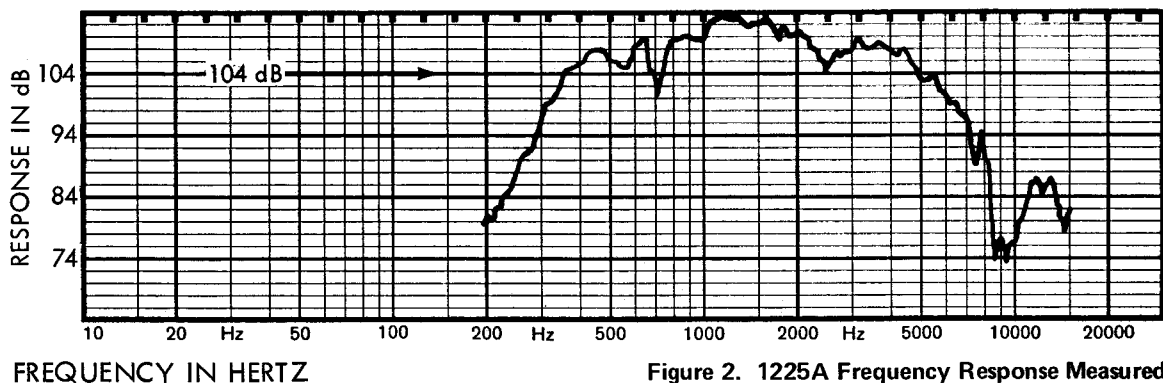


Figure 2. 1225A Frequency Response Measured at 4' on Axis with 1 Watt Input

# ALTEC 1215A 1225A

## SYSTEM SPECIFICATION (1215A and 1225A Combined)

**Frequency Range:** 35 Hz to 8000 Hz (see Figure 3)  
**Crossover Frequency:** 800 Hz with 12 dB/octave slope  
**Pressure Sensitivity:** 106 dB SPL measured at 4' on axis with 1 watt input of pink noise from 100 Hz to 10 kHz (Ref.: 0.0002 dyne/cm<sup>2</sup>). Equal to EIA rating of 59 dB SPL at 30' with 1 milliwatt input.  
98 dB SPL measured at 10' on axis with 1 watt input of pink noise from 100 Hz to 10 kHz (Ref.: 0.0002 dyne/cm<sup>2</sup>).

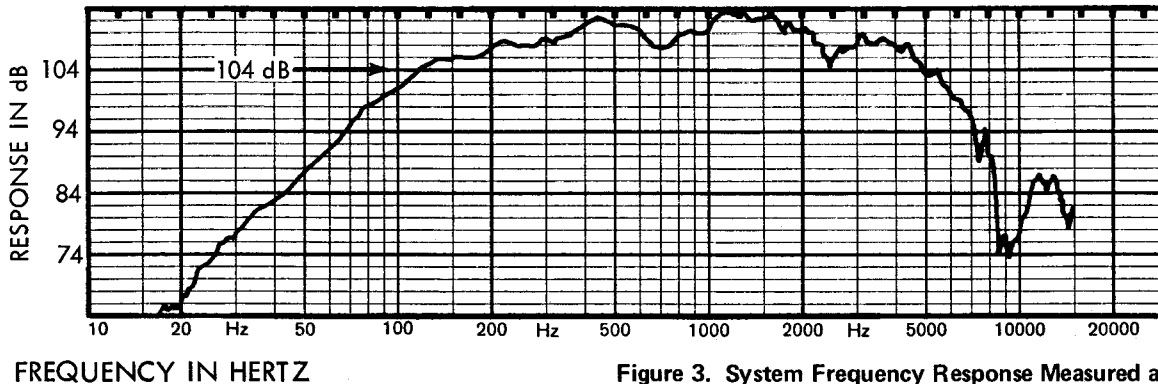


Figure 3. System Frequency Response Measured at 4' on Axis with 1 Watt Input

### ARCHITECT'S AND ENGINEER'S SPECIFICATIONS

The portable extended folded horn system shall contain a 15', low-frequency musical instrument loudspeaker. A 50', 2-conductor cable, with standard phone plug at each end, shall be included with the system. The system shall be portable, and shall meet the following performance criteria. Power rating, 150 watts. Frequency range, 35 Hz to 1000 Hz. Pressure sensitivity, 106 dB SPL measured at 4' on axis with 1 watt input of pink noise from 100 Hz to 1 kHz (equal to EIA rating of 59 dB SPL at 30' from 1 milliwatt input). Input impedance, 8 ohms. Dimensions, 48" H x 28" W x 23 $\frac{3}{4}$ " D. The enclosure shall be an extended folded horn fitted with rubber feet on steel front legs, rear roll-around casters and tow-bar handle. The enclosure shall be constructed of  $\frac{3}{4}$ " plywood and shall have a resilient epoxy spatter finish that shall be resistant to dents and scratches. The system shall weigh 110 pounds.

The portable extended folded horn system shall be the ALTEC Model 1215A.

The portable multicell system shall contain a multicellular horn having eight cells (each with exponential expansion), a high-frequency driver, an 800 Hz dividing network and a protective network for the high-frequency driver having 12 dB/octave rolloff below 600 Hz. A 50', 2-conductor cable, with standard phone plug at each end, shall be included with the system. The multicell system shall be portable and shall meet the following performance criteria. Power rating, 100 watts. Frequency range, 300 Hz to 8 kHz. Pressure sensitivity, 108 dB SPL measured at 4' on axis with 1 watt input of pink noise from 500 Hz to 10 kHz (equal to EIA rating of 61 dB SPL at 30' from 1 milliwatt input). Crossover frequency, 800 Hz with 12 dB/octave crossover slope. Input impedance, 8 ohms. Distribution pattern, 40° vertical by 80° horizontal. High-frequency shelving, continuously variable from 0 dB to approximately -20 dB. Dimensions, 19 $\frac{3}{4}$ " H x 28" W x 29 $\frac{1}{2}$ " D. The multicell system shall be housed in an enclosure constructed of  $\frac{3}{4}$ " plywood. The enclosure shall be fitted with a removable latching front cover and die-cast handles and shall have a resilient epoxy spatter finish that shall be resistant to dents and scratches. The system shall weigh 160 pounds.

The portable multicell system shall be the ALTEC Model 1225A.

The portable musical instrument sound reinforcement system combining the ALTEC 1215A and 1225A units shall meet the following performance criteria. Frequency range, 35 Hz to 8 kHz. Crossover frequency, 800 Hz with 12 dB/octave crossover slope. Pressure sensitivity, 106 dB SPL measured at 4' on axis with 1 watt input of pink noise from 100 Hz to 10 kHz (equal to EIA rating of 59 dB SPL at 30' with 1 milliwatt input).