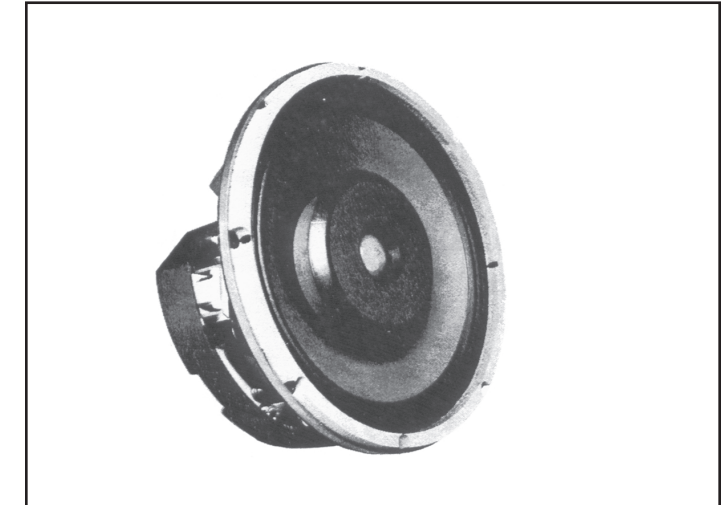


# 920-8B 12" Duplex® Loudspeaker System



COMMERICAL



## General Product Description

The 920-8B Duplex® loudspeaker system is a two-way loudspeaker with a 12.0-in. (30.5 cm) low frequency cone and high temperature voice-coil assembly coaxially mounted with a wide-dispersion dome radiator tweeter. The 920-8B utilizes a dual-section crossover network, centered at 1500 Hz that provides 12 dB of attenuation for each element outside its operating range. Clear, intelligible speech and fine music reproduction are ensured by the extended 70 Hz to 15 kHz frequency response.

Mounting holes are provided on the rear of the woofer magnet to mount an Altec 15716 (16 watt) or 15732 (32 watt) matching transformer to operate the loudspeaker from 70.7V distribution lines. The 920-8B's frame also allows the loudspeaker to be front- or rear-mounted.

Electro-Voice® offers enclosures and accessories to accommodate mounting the loudspeaker. These components are designed to work as a complete system offering a convenient and attractive in-ceiling or in-wall package.

The 920-8B is the ideal loudspeaker when a high-efficiency, wide-dispersion, easily mounted, full range loudspeaker is required for in-ceiling or in-wall installations.

## Architects' and Engineers' Specifications

The loudspeaker shall be a Duplex type with a 12.0-in. (30.5 cm) low-frequency cone and a high temperature voice coil assembly coaxially mounted with a wide dispersion dome radiator tweeter. The Duplex loudspeaker shall meet the following criteria: AES power rating shall be 125 watts of band limited pink noise (70 Hz to 15 kHz, 6 dB crest factor). Frequency response, uniform from 70 Hz to 15 kHz. Pressure sensitivity, 98 dB SPL at 1 meter (96 dB at

4 feet) on axis with one watt of band-limited pink noise from 500 Hz to 3 kHz (ref. 20 ipa). Minimum impedance, 5.1 ohms. The voice coils shall be LF 2.0 inches (5.1 cm) and HF - 1.5 inches (3.8 cm) in diameter, driven by ferrite magnets having flux densities of 1.15 Tesla (U) and 1.6 Tesla (HF). The loudspeaker shall be 12.3 inches (31.2 cm) in diameter and 5.0 inches (12.7 cm) deep. The weight shall be 16.4 lbs. (7.4 kg).

The duplex loudspeaker shall be the Electro-Voice® model 920-8B.

## Specifications:

<b>Pressure Sensitivity:</b> .....	98 dB SPL (1 w, 500 Hz to 3 kHz, re: 20 µLPa, see Note 1)
<b>Frequency Response:</b> .....	70 Hz to 15 kHz (see Figure 2, Note 2)
<b>Power Handling:</b> (70 Hz to 15 kHz)	
AES method .....	125 watts
Continuous program .....	250 watts
Peak Power .....	500 watts
<b>Maximum Long-Term Output:</b> .....	118.8 dB SPL (125 watts input, 1 m, re: 20 µPa, see Note 4)
<b>Impedance:</b>	
Minimum .....	5.1 ohms at 6 kHz
Nominal .....	8.0 ohms
<b>Components:</b>	
	12.0 inch (30.5 cm), high-efficiency, low frequency driver with a coaxially mounted, 1.5 inch (3.8 cm) high power-handling dome tweeter
<b>Crossover Network:</b>	
	Two-way at 1500 Hz with 12 dB per octave slopes

<b>Input Terminals:</b>	0.21 inch (0.53 cm) push-on type connectors
<b>Replacement VC/Dome Assembly:</b> .....	Model 25456 field replaceable
<b>Low Frequency Recone Kit:</b> .....	Model R-920-8
<b>Dimensions:</b>	
Loudspeaker Diameter: .....	12.3 inches (31.2 cm)
Bolt Circle Diameter: .....	11.6 inches (29.5 cm)
Baffle Opening: .....	11.1 inches (28.2 cm)
Bolt Hole Slots: .....	0.25 inches (0.6 cm) (8 slots spaced 45° apart) by 0.34 inches (0.9 cm)
<b>Depth Front-Mounted:</b> .....	4.0 inches (10.2 cm)
<b>Depth Rear-Mounted:</b> .....	5.0 inches (12.7 cm)
<b>Weight:</b>	
Net: .....	16.4 lbs. (7.4 kg)
Shipping: .....	17.6 lbs. (8.0 kg)
<b>Finish:</b> .....	Dark grey polyurethane
<b>Accessories:</b>	
Transformers: .....	15716, 15732

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 For customer orders, contact the Customer Service department at 800/392-3497 Fax: 800/955-6831  
 For warranty repair or service information, contact the Service Repair department at 800/865-2606  
 For technical assistance, contact Technical Support at 1(866)78AUDIO  
 Please refer to the Engineering Data Sheet for warranty information.  
 Specifications subject to change without notice.

Electro-Voice®

## Installation

Installation of explosion-proof speakers must conform with governing electrical equipment hazardous locations and provisions of the National Electrical Code. **NO ALTERATIONS CAN BE MADE TO THESE DRIVER UNITS!**

No holes can be made, or holding devices screwed into the case to possibly weaken or otherwise endanger the structure after installation.

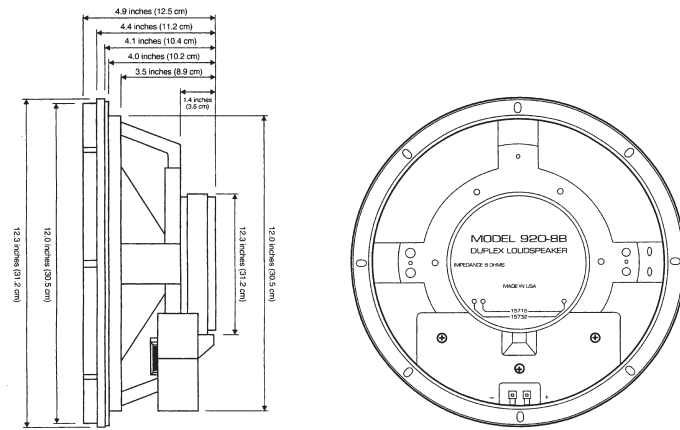
All main bolts on the driver case housing must be tightened. Wiring may be run in threaded rigid, or approved standard electrical flexible conduit and engage five full threads. Explosion-proof conduit boxes, junctions, and fittings are approved type and usually contain screw-in covers. Unions, elbows, and bends are also of special design.

## Electrical Connections

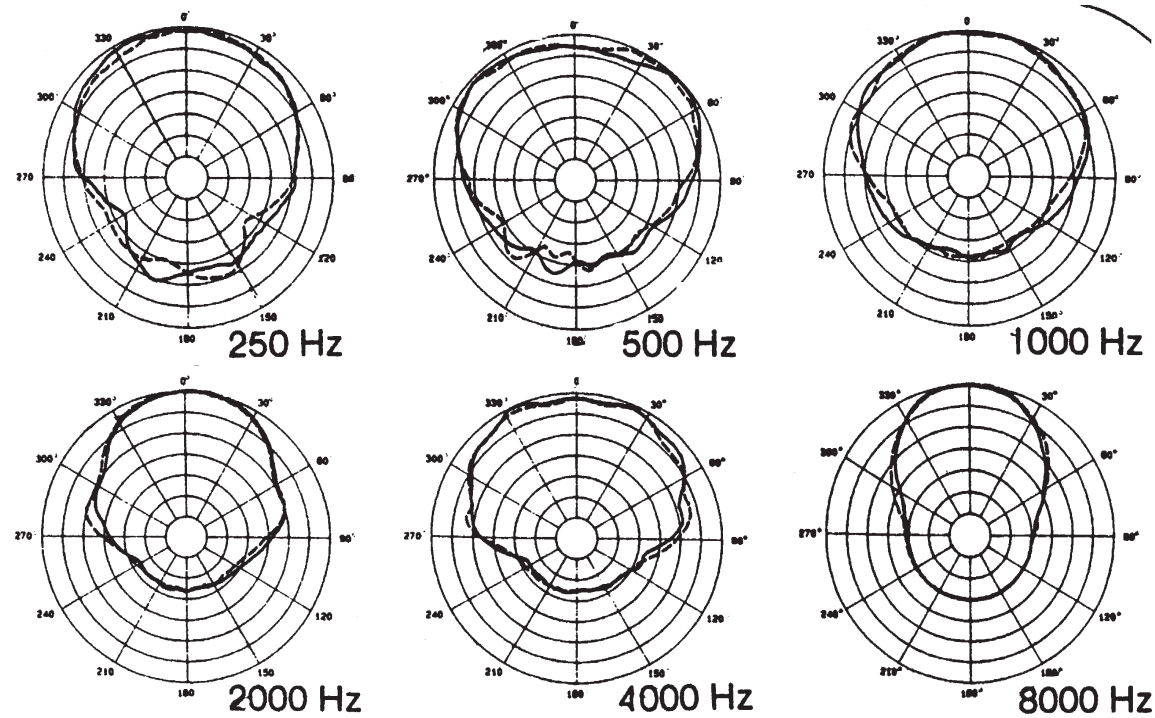
Access to the driver unit for electrical connections or installation of the Model 5030 transformer is made by removal of the six bolts holding the case halves together. In the event of a short run of conduit line, up to 100 feet, the 8-ohm voice coil of the driver may be connected directly to the line. Use of the 8-ohm tap on the amplifier, a high-impedance or constant line voltage distribution system is recommended. The Model 5030 (70V/25V) matching transformer (optional) is coded for easy connection.

## Reassembly Procedure

Tighten the six case bolts using torque of 25ft-lbs. Check between the case halves with a 0.00015-inch feeler gauge enters more than 1/8-in. at any point, tighten bolts to 35-ft-lbs. Recheck with feeler gauge.



Dimensions



Polar Response Charts

