RADIAN 636PB/745PB/835PB

1.4" COMPRESSION DRIVERS

Over a decade ago, Radian Audio Engineering went into business with a commitment to manufacture loudspeaker components that accurately reproduce the full frequency range of the audio spectrum. We began by building coaxial loudspeakers and compression drivers. The Radian 636PB, 745PB and the 835PB, with a 3.0" diaphragm, represent the refinement of our design efforts in 1.4" exit-format compression driver technology.

All Radian compression drivers feature heat-treated structural alloy aluminum diaphragm domes which form an optimum balance of strength and low weight. This is a key factor in extending high frequency response.

Radian diaphragms utilize a Mylar® surround, which not only enhances the diaphragm's reliability, but eliminates fatigue which destroys other compression driver diaphragms.

In addition to being virtually indestructible, Mylar® surrounds provide excellent dampening characteristics which translate into smooth, low-distortion, linear output devoid of the resonant peaks typically present in diaphragms made with metal surrounds.

Beyond the obvious advantages of our Mylar®-aluminum composite construction, Radian diaphragms utilize high temperature voice coil formers and advanced adhesives which allow Radian compression drivers to sustain high RMS and peak power levels over extended periods of time.

Radian diaphragm assemblies are self-aligning and may be rapidly serviced in the field by simply removing the three screws on the driver's backcap and replacing the old unit with the new one.

Superior sound quality, unparalleled power handling, extended high frequency response and high reliability make our compression drivers the preferred choice of loudspeaker systems manufacturers, consultants, contractors, designers and engineers around the world. They are ideal for use in high output, high power touring sound systems and stage monitors, while their low distortion, high fidelity and linear response delivers clear, crisp music and speech for theatrical, auditorium, stadium, convention and church installations.



- ✓ EXTENDED HIGH FREQUENCY RESPONSE
- ✓ 1.4" THROAT
- ✓ 50, 60, 75 WATTS RMS
- ✓ MYLAR® SUSPENSION
- ✓ HIGH SENSITIVITY

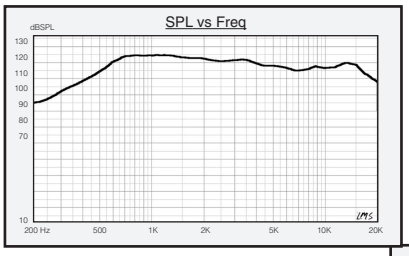
636PB/745PB/835PB

1.4" COMPRESSION DRIVERS

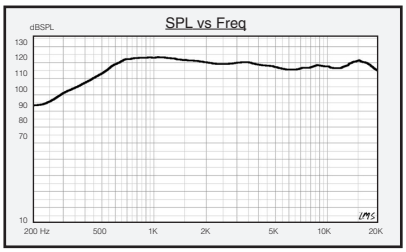
SPECIFICATIONS

	636PB	745PB	835PB
Frequency Response	500 Hz – 20 kHz.	500 Hz – 20 kHz	500 Hz – 20 kHz
Maximum Power Handling*	50 watts RMS	60 watts RMS	75 watts RMS
Sensitivity	112 dB, one watt at one meter	111 dB, one watt at one meter	112 dB, one watt at one meter
Recommended Crossover	500 Hz, 24 dB/octave 1200 Hz, 12 dB/octave	500 Hz, 24 dB/octave 1200 Hz, 12 dB/octave	500 Hz, 24 dB/octave 1200 Hz, 12 dB/octave
Nominal Impedance	8 or 16 ohms	8 or 16 ohms	8 or 16 ohms
D.C. Resistance	6.2 or 12.4 ohms (±10%)	6.2 or 12.4 ohms (±10%)	6.2 or 12.4 ohms (±10%)
Voice Coil Diameter	3.0" (76.2mm)	3.0" (76.2mm)	3.0" (76.2mm)
Throat Diameter	1.4" (35.56mm)	1.4" (35.56mm)	1.4" (35.56mm)
Voice Coil Material	Edgewood copper-clad aluminum	Edgewood copper-clad aluminum	Edgewood copper-clad aluminum
Diaphragm Material	0.002" (0.05mm) heat-treated aluminum alloy	0.002" (0.05mm) heat-treated aluminum alloy	0.002" (0.05mm) heat-treated aluminum alloy
Diaphragm Suspension	Mylar®	Mylar®	Mylar®
Magnet	49.6 oz. (1.41 kg) Ferrite V	49.6 oz. (1.41 kg) Ferrite V	72.0 oz. (2.04 kg) Ferrite V
Flux Density	16,400 gauss	17,500 gauss	19,000 gauss
Input Connectors	Goldplated push-button terminals	Goldplated push-button terminals	Goldplated push-button terminals
Mounting	Four 1/4-20 studs, on 4.0" (101.6mm) centers	Four 1/4-20 studs, on 4.0" (101.6mm) centers	Four 1/4-20 studs, on 4.0" (101.6mm) centers
Dimensions	6.50" (165.1mm) diameter, 2.62" (66.5mm) deep less studs	6.50" (165.1mm) diameter, 2.85" (72.4mm) deep less studs	7.50" (190.5mm) diameter, 2.85" (72.4mm) deep less studs
Weight	9.2 lbs. (4.18 kg)	11.2 lbs. (5.09 kg)	14.8 lbs. (6.72 kg)

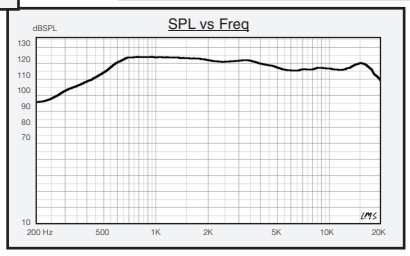
*EIA Standard RS-426A through a 1 kHz 24 dB/octave Linkwitz-Riley crossover



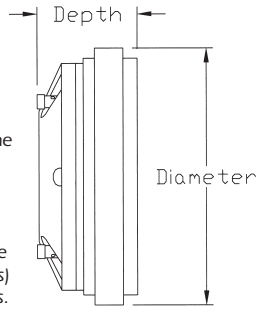
Amplitude vs. Frequency of the Radian 636PB measured on a 1.4" (50.8mm) high frequency horn with a one watt (2.83 Vrms) input at 8 ohms.



Amplitude vs. Frequency of the Radian 745PB measured on a 1.4" (50.8mm) high frequency horn with a one watt (2.83 Vrms) input at 8 ohms.



Amplitude vs. Frequency of the Radian 835PB measured on a 1.4" (50.8mm) high frequency horn with a one watt (2.83 Vrms) input at 8 ohms.



Mylar is a registered trademark of Dupont.

Specifications subject to change without notice.

LIMITED WARRANTY

Radian Audio Engineering, Inc. products, when sold domestically, are guaranteed for a period of five (5) years from the date of original purchase against malfunctions due to defects in workmanship. If such a malfunction occurs, the product will be repaired or replaced at our option, without charge, if delivered prepaid to the factory. Product will be returned prepaid via ground transport. This warranty does not extend to damage resulting from improper installation, misuse, neglect or abuse. The warranty does not apply to external finish or appearance. The warranty does not apply to burnt voice coils. In no event shall Radian Audio Engineering, Inc. be liable for incidental or consequential damages including, without limitation, injury to persons or property or loss of use.

600 N. Batavia Street
Orange, CA 92868
Phone: (714) 288-8900
Fax: (714) 288-1133
E-mail: radian@radianaudio.com
Web: www.radianaudio.com