

KRADIAN
SOUND TO THE RADIANTH DEGREE

**SOUND
DESIGN
TECHNOLOGY**

**COMPONENT
PRODUCTS
CATALOG**





COMPANY PROFILE

Radian Audio, founded in 1988, strives to develop the world's highest quality professional audio products and components.

By utilizing an exclusive alloy compound and "trade-secret" heat treatment process, we insure the finest quality high frequency devices available. High power handling, extended frequency response, improved clarity are all used to describe our HF components and diaphragms.

In addition, Radian offers many solutions for most installation and touring applications.

All of our products are hand crafted and backed by our 5-year limited warranty.

**Radian Audio Engineering, Inc.
600 N. Batavia Street
Orange, CA 92868**

**ph 714.288.8900
fax 714.288.1133**

**info@radianaudio.com
www.radianaudio.com**

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950PB
2.0" Throat

- ✓ **Extended High Frequency Response**
- ✓ **Mylar Suspension**
- ✓ **4" Voice Coil**
- ✓ **Neodymium Magnetic Structure**
- ✓ **8 or 16 Ohm Impedence**
- ✓ **Extremely Low Distortion**
- ✓ **Line Arrays, Touring Sound, Studio Applications**



760NEO
2.0" Throat



745NEO
1.4" Throat

- ✓ **Wide Frequency Response**
- ✓ **Mylar Suspension**
- ✓ **3" Voice Coil**
- ✓ **Ultra-Low Distortion**
- ✓ **High Power Handling**
- ✓ **210 Watts Program Power**

Heralded by Many as the “World’s Finest 2.0” Compression Driver.

The Radian 950PB represents over 15 years of experience in research and development into a true masterpiece of a component.

This state-of-the-art compression driver consists of a hand-made 4.0” diameter alloy diaphragm and cast aluminum back can and heatsink.

The Radian 950PB utilizes a five-slit custom-designed phase plug with proprietary Mylar suspension and structural alloy dome, greatly reducing 1st and 2nd order harmonic distortion. The result is an extremely clean and less psycho-acoustic fatiguing sound.

Additional features include a 4” voice coil for high power handling capacity with an 8 or 16 ohm impedance rating, very low magnetic stray field energy and a light weight of 10.4 lbs.

The Neodymium Line of Compression Drivers from Radian Audio Introduce an Ultra-Low Distortion and Produce an Extremely Clean High-Frequency Response.

They also feature a higher sensitivity, lighter weight and a higher handling power capability.

These drivers all utilize a three-slit phase plug with a proprietary Mylar diaphragm suspension and pure aluminum dome which greatly reduces 2nd and 3rd harmonic distortion. This delivers an extremely smooth and clean high frequency response that has less fatigue to the ear.

Radian Audio’s neodymium compression drivers are a perfect choice for pro audio loudspeaker and line array cabinets. The ultra light weight and small size allow for multiple compression drivers to be mounted on the same horn.

Model	Power Handling	Frequency Response	Sensitivity	Weight	Throat Exit
745NEO	105W AES	500Hz-20kHz	112dB	4.6 lbs. (2.09 kg.)	1 inch
760NEO	105W AES	500Hz-20kHz	112dB	4.6 lbs (2.09 kg.)	2 inch
950PB	125W AES	500Hz-20kHz	111dB	10.4 .lbs (4.73 kg.)	2 inch



5215NEO



5312NEO

Radian Audio introduces neodymium coaxial loudspeakers.

The 5312NEO and the 5215NEO models both bring the best new world class technology to the market. These models use a 4" voice coil for the low frequency transducer and a full 3" voice coil in the compression driver with a 2" exit. They also feature Dual neodymium magnets, one for each voice coil.

The compression driver mates directly to a 2" horn throat machined into the center of the Low Frequency pole piece. The flare is completed by the cone of the woofer which results in an excellent polar response pattern. These speakers yield a ultra-smooth frequency response, high power and an excellent sensitivity.

Radian Audios two model light weight coaxial speakers are featured in the famous APEX NEO series floor monitors that out perform other speaker models world wide.

- ✓ **2" Throat, 3" Diaphragm Compression Driver**
- ✓ **Dual Neodymium Magnets**
- ✓ **15" (5215) and 12" (5312) Low Frequency Section with a 4" Voice Coil**
- ✓ **90° Conical Dispersion**
- ✓ **1400 Watts Continuous Program Power**
- ✓ **Cast Aluminum Frame**
- ✓ **High Sensitivity**

Model	Power Handling	Frequency Response	Sensitivity	Weight
5215NEO	700W AES 1400W Program	40Hz-20kHz	102dB	15.1 lbs. (6.85 kg.)
5312NEO	700W AES 1400W Program	46HZ-20kHz	102dB	14.5 lbs. (6.58 kg.)

NEODYMIUM SUBWOOFERS



2216 NEO



2218 NEO

The Radian Neodymium low frequency transducers produce extremely high levels of bass energy.

These woofers are designed as extended low frequency devices, used as a subwoofer or general purpose LF transducer.

The 2216 Neo and 2218 Neo feature a dual Neodymium magnet structure which yields more power in its speaker class. Integral to this design is a composite ribbed cone, reinforced with X-5 material.

The voice coils are a double wound coil for better transient response, using advanced adhesives to give them extra power handling. They have an extended travel voice coil gap that produces the result of a large Xmax value of 21.3 mm.

- ✓ **Low Distortion**
- ✓ **4" Double Layer Voice Coil**
- ✓ **X-5 Treated and Coated Cone**
- ✓ **Venturi-Vented Cooling**
- ✓ **1400 Watts AES, 2800 Watts Program Power**
- ✓ **Dual Neodymium Magnets**
- ✓ **Cast Aluminum Frame**
- ✓ **High Sensitivity**

Model	Power Handling Response	Frequency	Impedance/Sensitivity	Configuration
2216 Neo 15" Subwoofer	1400W AES 2800W Program	28Hz-2000kHz	8 Ohm 101dB	Cast Frame 15" LF Driver
2218 Neo 18" Subwoofer	1400W AES 2800W Program	22Hz-2000kHz	8 Ohm 101dB	Cast Frame 18" LF Driver



5210



5215B



5312



2208



2210



2312



2218




2216

If You are Looking for the Competitive Edge when Building Your Own Enclosures, then Look No Further.

Radian Audio offers the finest components available for the do-it-yourselfer and custom builder, from our industry-leading omni-point coaxial drivers to our amazing subwoofers and compression drivers.

Low distortion and high power handling are some of the key design elements in all of our drivers.

Discover what many of today's top touring sound companies have discovered—that no other company offers the same combination of quality, performance and price that Radian does.



Model	Power Handling Response	Frequency	Impedance/Sensitivity	Configuration
5210 10" Coaxial	375W AES 750W Program	46Hz-18kHz	8 Ohm 95dB	Cast Frame 1" HF Driver
5212 12" Coaxial	375W AES 750W Program	70Hz-20kHz	8 Ohm 96dB	Cast Frame 1" HF Driver
5312 12" Coaxial	625W AES 1250W Program	60Hz-20kHz	8 Ohm 96dB	Cast Frame 2" HF Driver
5215B 15" Coaxial	625W AES 1250W Program	50Hz-20kHz	8 Ohm 96dB	Cast Frame 2" HF Driver
2208 8" Woofer	225W AES 500W Program	55Hz-3.5Hz	8 Ohm 96dB	Cast Frame
2210 10" Subwoofer	375W AES 750W Program	48Hz-4kHz	8 Ohm 96dB	Cast Frame
2312 12" Woofer	625W AES 1250W Program	44Hz-3.5kHz	8 Ohm 96dB	Cast Frame
2216 15" Subwoofer	725W AES 1500W Program	34Hz-3.5kHz	8 Ohm 96dB	Cast Frame
2218 18" Subwoofer	725W AES 1500W Program	26Hz-3.5kHz	8 Ohm 99dB	Cast Frame



450PB



465PB



475PB



636PB



745PB



835PB



651PB



760PB



850PB

- ✓ Extended High Frequency Response
- ✓ 1.0", 1.4" or 2.0" Throat
- ✓ Mylar Suspension
- ✓ High Sensitivity
- ✓ Standard Bolt Patterns for Easy Installation
- ✓ 8 or 16 Ohm Impedance

**Superior Sound Quality,
 Unparalleled Power Handling,
 Extended High Frequency
 Response and High Reliability.**

Our Compression Drivers are 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, line arrays and stage monitors, while their low distortion, high fidelity and linear response delivers clear, crisp music and speech for theatrical, auditorium, stadium, convention center and house of worship installations.

All Radian Audio Compression Drivers feature a proprietary heat-treated structural alloy aluminum diaphragm dome that forms an optimum balance of strength and low weight. This is a key factor in extending high frequency response. Radian diaphragms utilize a Mylar surround, that not only enhances the diaphragms reliability, but eliminates metal fatigue which destroys other manufacturer’s diaphragms. 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.

Available in either 1”, 1.4” or 2.0” exit formats, Radian offers the worlds finest compression drivers for a number of specific applications.

Model	Power Handling	Frequency Response	Impedance/ Sensitivity	X-over	Throat Exit
450PB	35W AES 70W Program	800Hz-20kHz	8 or 16 110dB	800Hz	1 inch
465PB	50W AES 100W Program	800Hz-20kHz	8 or 16 112dB	800Hz	1 Inch
475PB	50W AES 100W Program	800Hz-21kHz	8 or 16 111dB	800Hz	1 Inch
636PB	60W AES 120W Program	500Hz-20kHz	8 or 16 112dB	800Hz	1.4 Inch
745PB	75W AES 150W Program	500Hz-20kHz	8 or 16 111dB	800Hz	1.4 Inch
835PB	100W AES 200W Program	500Hz-20kHz	8 or 16 112dB	800Hz	1.4 Inch
651PB	60W AES 120W Program	500Hz-20kHz	8 or 16 112dB	800Hz	2.0 inch
760PB	75W AES 150W Program	500Hz-20kHz	8 or 16 110dB	800Hz	2.0 Inch
850PB	100W AES 200W Program	500Hz-20kHz	8 or 16 112.2dB	800Hz	2.0 inch



508/2B



508/2BBK



512/2B



512/2BC

In addition, we offer all our coaxials in either 8 or 16 ohm compression driver versions, with or without crossovers. Some models feature mounting brackets with transformers and networks attached for ease of installation. All drivers are easily rebuilt due to our self-aligning diaphragms and re-cone kits.

Radian's Ceiling Speakers are, Quite Simply, the Best Coaxial Ceiling Speakers Available.

First of all, they are true coaxial loudspeakers. This means much more than a high frequency unit mounted coaxially with the LF unit. Radian uses one of the best compression drivers ever developed, coupled directly to a LF center pole with a 1" horn machined into the shape of an exponential horn, which loads the compression driver at a taper rate at least two octaves below crossover. This horn is coupled precisely at its exit to our drivers and provides a perfect 90° conical dispersion.

Radian's compression drivers utilize aluminum domes with an industry pioneering Mylar surround that greatly reduces harmonic distortion at the same time improving reliability over one-piece metal diaphragms.

With multiple configurations ranging from an 8" coaxial up to a 15" Cast frame 1250w powerhouse with a 3" diaphragm compression driver capable of 127dB continuous output, we have the solution for all applications.

Our products can be heard in a number of large-scale installations where superior sound quality and maximum coverage were the main design criteria.

Installations such as Washington, DC Convention Center; Bally's; Caesar's Palace Grand Ballroom; Salt Lake City Convention Center; Newark, NJ Airport; and the Honolulu Convention Center just to name a few.

Model	Configuration	Frequency Response	Power Handling	HF Driver/Dispersion	Frame
508/2B	8" 2-way	50Hz-20kHz	250W AES 500W Program	1" exit 90° conical	stamped
508/2BBK	8" 2-way with Bracket	50Hz-20kHz	250W AES 500 W Program	1" exit 90° conical	stamped
508/2BC	8" 2-way with Bracket and X-over	50Hz-20kHz	250W AES 500W Program	1" exit 90° conical	stamped
512/2B	12" 2-way	40Hz-20kHz	375W AES 750W Program	1" exit 60° 1K and up	stamped
512/2BC	12" 2-way with Bracket and X-over	40Hz-20kHz	375W AES 750W Program	1" exit 60° 1K and up	stamped



RC-161-2



RC-151



RC-141



RC-500

The RC Series Contains Low Cost, High Performance, Small Format Surface Mount and Ceiling Loudspeaker Packaged Systems.

Specified and installed by owners, architects, contractors, and consultants world-wide for most any commercial, industrial or institutional application.

Your choice of three different sized ceiling speakers, 6.5" with 30° pivotal HF tweeter, 5.25", and a 4." Fire rated steel back cans with tuned port enclosures and quick mount tabs, integral cable clamp/strain relief and seismic tabs. Included in each pair of speakers is the TB6 tile bridge assembly for use in existing drop and acoustic ceilings where a T-bar mounting is needed. A convenient front mounted selector switch on the 6.5" allows tap selection without the need to remove the speaker. This switch also includes a transformer bypass setting for 8 ohm direct coupled operation.

UL1480 Compliant.

The two-way RC-500 5.25" x .5" surface mounted speaker provides extended frequency response. High impact polystyrene enclosure, includes u-bracket for wall or ceiling installation. Adjustable 70/100v variable wattage tap for installation in both commercial and residential applications. This switch also includes a transformer bypass setting for 8 ohm direct coupled operation.

Model	Power Handling	70v Taps/ 100v Taps	Frequency Response	LF Driver	HF Driver	Sensitivity
RC-500	100W AES	1.25,2.5, 7.5,15 — 2.5,5, 7.5,15	80Hz-19kHz	5.25" (135mm) Poly Cone 1" Coil on Aluminum Former	.5" (13.25mm) Polyester	90dB
RC-161-2	75W AES	1.9,3.7, 7.5,15,30 — 3.8,7.5, 15,30	60Hz-20kHz	6.5" Poly Cone, Butyl Rubber Surround	1" Silk Pivotal Dome	89dB
RC-151	38W AES	.625,1.25, 2.5,5,10 1.25, 2.5, 5,10	80Hz-18kHz	5.5" Wool/ Composite, Butyl Rubber Surround	.5" Silk Dome	88dB
RC-141	38W AES	.625,1.25, 2.5,5,10 .25, 2.5, 5,10	95Hz-18kHz	4" Wool/ Composite, Butyl Rubber Surround	.5" Silk Dome	88dB



1225



1245



1228



1292



1282

- ✓ High Power Handling
- ✓ Extremely Low Distortion
- ✓ Extended Hi-Frequency Performance
- ✓ Indestructible Mylar Surround
- ✓ Aluminum Alloy Compression Domes

Radian Audio Manufactures Premium Replacement Diaphragms for Most Popular JBL, ALTEC, Emilar, and TAD Compression Drivers.

For use in professional loudspeaker systems utilized in fixed installation, touring sound and professional studio applications, each replacement diaphragm provides high efficiency and accurate reproduction with extended bandwidth. All Radian Audio replacement diaphragms are designed and manufactured to have equivalent, and in most cases, better performance than the OEM original.

Our diaphragms are precision formed from a proprietary heat-treated, structural aluminum alloy and bonded to a copper-clad aluminum voice coil with a Kapton former utilizing precise tooling, coupled with a specially developed Mylar surround. Mylar surrounds enhance the diaphragm's reliability and eliminates fatigue stresses that destroy other compression driver diaphragms. The Mylar surround also provides superior dampening of the voice coil/diaphragm assembly for smooth, low distortion linear output with excellent transient response. The result is a much more robust diaphragm with high power handling and improved sonic characteristics, outperforming other exotic and costly metals such as titanium and beryllium.

Radian diaphragms are all self aligning, making field repairs simple and accurate with no special tooling needed.

Radian Part Number	MFR	Replacement Driver
1175 (8 or 16 Ohm)	Emilar	EA175, EC175, ECH175, EK175
1321 (8 or 16 Ohm)	Emilar	EC320, EC320B
1225-8	JBL	LE175, LE85, 2410, 2420, 2470, 2425H, 2426H, 2427H
1225-16	JBL	2145J, 2416J, 2417J
1245-8	JBL	375,376,2440,2441,2445H,2446H,2446H, 2450H, 2451H
1245-16	JBL	375, 376, 2440, 2441, 1245J, 2446j, 2447J, 2450J, 2451J, 2445J
1282 8/16	JBL	2482, 2485
1292 8/16	TAD	4001, 4002
1450ZT/PB 8/16	Radian	508, 510, 512, 508/2; 510/2, 512/2, 5008, 5010, 5012, 5208, 5210, 5212
1750ZT/PB 8/16	Radian	5215, 5312, 635, 636, 650, 651, 735, 745, 750, 760, 835, 850, 4735, 4750
1760ZT/PB 8/16	Radian	745PB Neo, 760PB Neo, 5312 Neo, 5215 Neo
1228-8/16	Altec	602, 802, 806, 808, 902, 904, 908, 909



AUDIO ENGINEERING, INC.

600 North Batavia Street

Orange, CA 92868

www.radianaudio.com

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