## 15"/12"/10"/8" 2-Way Active PA Speaker

High-power 2-way PA sound reinforcement speaker systems for live and playback applications

- B215D/B212D: 550-Watts
- B210D/B208D: 220-Watts

Ultra-compact lightweight systems deliver excellent sound even at extreme sound pressure levels

Revolutionary Class-D amplifier technology yields enormous power, incredible sonic performance and super-light weight

Internal switch-mode power supply for noise-free audio, superior transient response and very low power consumption

Integrated sound processor for ultimate system control and speaker protection with active variable highpass filter

Extremely powerful, handmade longexcursion driver provides incredibly deep bass and acoustic power

- B215D: 15"
- B212D: 12"
- B210D: 10"
- B208D: 8"

State-of-the-art 1.35" aluminumdiaphragm compression driver for exceptional high-frequency reproduction

Ultra-wide dispersion via large-format exponential horn

Built-in ultra-low noise Mic/Line input with Volume control and Clip LED

Dedicated 2-band EQ

Additional Line output allows linking of additional speaker systems

Versatile trapezoidal enclosure design allows different positioning:

- Stand mounting with 35-mm pole socket
- Tilts on its side for use as a floor monitor

Two ergonomically shaped handles on B215D/B212D and one on the B210D for easy carrying

High-quality components and exceptionally rugged construction ensure long life

Conceived and designed by BEHRINGER Germany

# behringer.com

# Loudspeakers / Sound Reinforcement

EUROLIVE D Series — 550/220-Watt 2-Way PA Speaker Systems with 15"/12"/10"/8" Woofer and 1.35" Aluminum-Diaphragm Compression Driver





Finally, great-sounding active loudspeakers that won't break your back or bank account!

Thanks to our revolutionary Class-D amplifier technology and internal switch-mode power supplies, EUROLIVE D Series loudspeakers provide a much better power-toweight ratio than competing active speakers. Put simply, you get all the power without the backbreaking weight. And the sound quality of these lightweight loudspeakers exceeds that of our extremely popular EUROLIVE B212A and B215A systems — plus we've included two 220-Watt models, the B210D (10") and B208D (8") for less demanding applications.

Due to their high-efficiency design, they crank out 550/220 of the cleanest, punchiest audio Watts you've ever heard from a compact loudspeaker system. The integrated sound processor provides total system control, along with dependable protection of the LF and HF transducers, thanks to the built-in active high-pass filter, which virtually eliminate distortion — even at extreme operating levels. In addition, all four models feature an Ultra-Low Noise (ULN) Mic/Line input with LEVEL control and a dedicated 2-band EQ (bass/treble) for easy control.

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# 15"/12"/10"/8" 2-Way Active PA Speaker



One of the coolest things about active loudspeakers is the lack of back-breaking racks of amps, crossovers and EQs that are often required to make passive speaker systems sound almost as good. But that comes with a trade-off — that extra weight is transferred to the loudspeaker, making it difficult for a single user to heave all that mass onto the top of a speaker stand.

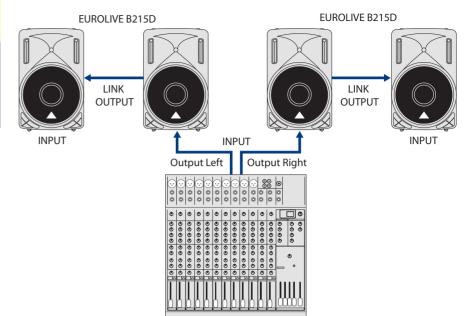
BEHRINGER's D Series'"Intelligent-Design" merges the best features of active loudspeakers with significantly lower weight by using switch-mode power supplies and Class-D amplifier topology.

Hidden deep inside each enclosure is the equivalent of an active 2-way electronic crossover, graphic EQ, parametric EQ, mic preamp, limiter and two Class-D power amplifiers, yet overall weight is less than comparable loudspeaker systems! These components work together seamlessly to provide optimum sound quality — and it all takes place automatically, without you having to touch a single knob.

# Class D Amplifier Technology delivers high power with low weight.

Instead of operating relatively continuously like Class AB circuits, Class D amps switch on and off thousands of times per second, delivering power only when needed. In other words, the amplifier is either fully on or fully off, which significantly reduces the power losses

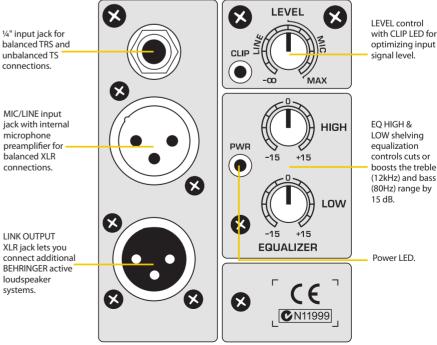




XENYX 2442FX

in the output devices. This is easy in theory and complex in practice, which is why there are so many different Class D designs. Without boring you with terms like PWM Generation and Gate Drivers, let's just say that to realize the benefits of a Class D design requires compensating for a lot of potential problems that can cause audible distortion. BEHRINGER didn't invent Class D technology, but our R&D Department has been working for years to perfect our own version with all the benefits of reduced weight and cool running, and none of the drawbacks. That's why we invested over a solid year of research time eliminating pitfalls like quantizing errors and excess dead time, selecting just the right switching frequency (and other equally tech-y terms). And why we spent an equally long time testing individual components to ensure they will stand up to the rigors of the real world.

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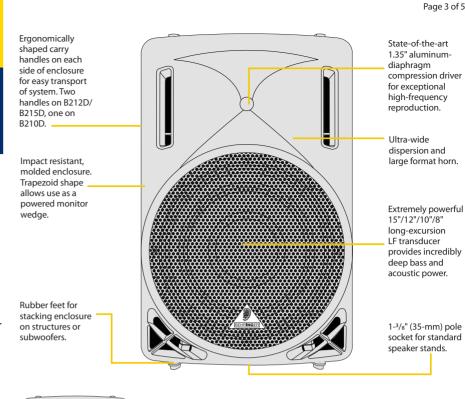


# 15"/12"/10"/8" 2-Way Active PA Speaker

When combined with switching-mode power supplies that replace heavy toroid transformers, our new designs provide more dynamic punch since the higher switching frequency reloads the supply's capacitors much faster. And, because they are so much more efficient, the D Series runs cooler and doesn't require huge, heavy heat sinks. The resulting speakers systems are much lighter, making them easy to transport and set up. Our no-compromise design means your D Series active loudspeakers will deliver full power and incredible fidelity all night long, with no need for rest cycles.

#### **Instant PA system**

With just a single D Series loudspeaker system and a microphone or MP3 player, you can set up an instant sound system. Thanks to the built-in preamp section, you just connect a dynamic mic and raise and lower the volume with the Level control. Plug in your sound source, place the speaker on a tabletop or stand, and power up. It's just that easy. And if you need more coverage, simply use the convenient LINK OUTPUT XLR connector to add more active loudspeakers.





B215D



B212D





B210D

B208D



#### Stereo music system

You can even use two D Series enclosures for stereo playback of your MP3, CD or old-skool cassette deck without any additional hardware. Just plug the appropriate stereo "breakout" adapter into your deck's output jack and run the cables to the ¼" inputs on each loudspeaker. Set the Level and EQ controls the same on both enclosures. Voilà, instant party!

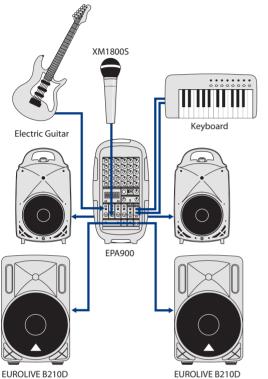
#### **Marvelous monitoring**

Thanks to their trapezoidal design, these cabinets can be laid on their side providing the ideal angle for onstage monitor wedge applications. Hookup is simple, requiring only a single XLR or 1⁄4" cable from the monitor send on your mixing console and, of course, power. Additional monitors can be chained together via the XLR LINK OUTPUT jack on the rear panel.

#### **Custom-designed transducers**

Let's face it; the transducers (woofers and tweeters) are the only part of a sound system you actually hear, so we don't cut any corners. While some of our competitors are content to buy off-the-shelf transducers and plug them into their boxes, we custom-design and build our transducers from scratch. Not only do we wind our own voice coils, we process the paper pulp into cones and even machine our own backplates. This enables us to control the quality,

15"/12"/10"/8" 2-Way Active PA Speaker



and frankly, make better components, like the long-excursion LF transducers and state-of-the-art 1.35" compression drivers we deploy in each and every EUROLIVE enclosure.

#### Low frequency response

The EUROLIVE D Series was built with extended low frequency handling in mind. With a tuned port, internally braced, injection molded enclosure, each model's customdesigned LF transducer (woofer) really cranks out tight low end. Keep in mind that bass response varies according to LF transducer size, so the larger the speaker, the more bass you will be able to generate.

### Accurate non-fatiguing midrange and treble

Even if your particular application doesn't include booming bass, you'll love the sheer accuracy of these loudspeakers. Over a year of design went into a exponential horn/aluminum dome compression driver combination that could do justice to loud hard rock or dance music — yet could also satisfy audiophiles with its musical timbre and attention to detail. For spoken word, singing or acoustical instruments, they are un-matched for being able to articulate complex harmonic details. In fact, many customers think it's the most natural-sounding speaker they've ever heard at anywhere near the price.

#### **Processor controlled output**

Dynamic processing is one of the best ways to maximize output without sacrificing sound quality. The D Series' built-in circuitry automatically adjusts program content, allowing the loudspeaker to operate at extreme levels. It accomplishes this by reducing bass output slightly as you approach the limit of the transducers. This frees up LF amp and transducer resources, so that higher overall volume can be realized. It's like having a tiny soundman inside each cabinet constantly monitoring and changing output parameters. By making subtle changes to the crossover frequency and the audio content, the system is able to crank out more sound — without the slightest hint of distortion.

#### Massive power to size ratio

Cutting-edge technology and high-fidelity speakers are not all it takes to get your message across — you need power, and lots of it. At the heart of each EUROLIVE D Series loudspeaker are two high-current amplifiers with a total output of 550-Watts for the B212D/B215D and 220-Watts for the B210D/B208D. They're capable of driving the speakers to their maximum with no distortion — and without speaker damage, thanks to active internal protection circuits. Put simply, they will astound you with their massive punch, smooth mids and articulate top-end!

### Which speaker do I need?

As you've probably noticed, we make these active loudspeakers in four different woofer sizes. Which one is right for you?

Well, let's start with your application. Is it spoken word in a hotel ballroom? Hard rock in a park? A folk singer or a drum 'n' bass DJ? Loud enough for an 18-year old or loud enough for your grandmother? A huge auditorium or a tiny club?

Physics are physics and a 15" low frequency transducer has almost 40% more surface area with which to move air than a 12". A 12" has 30% more area than a 10", and a 10" has 35% more than an 8". So the easiest answer is "Whether to choose one speaker cabinet over another depends on your bass requirements."

If you're addressing a small meeting, or demoing the latest "sliceo-chop-o-vegamatic" at the swap meet or county fair, the B208D might be all the speaker you'll need. But if you're providing disco to the masses at a standing room only nightclub or you just need to crank it up louder, then the B215D may be a better choice.

#### Continued on next page



**OUTPUT POWER** 

Peak power

Peak power

Peak power

**RMS** power

Peak power

Woofer **B212D** Size

RMS @ 1% THD

B215D Size

Tweeter

RMS @ 1% THD

B212D/B215D RMS @ 1% THD

**AUDIO INPUTS** XLR (servo-balanced)

Input impedance

Input impedance

Sensitivity

Sensitivity

Low-frequency range B208D/B210D RMS @ 1% THD

B212D/B215D **RMS** power

**High-frequency range** B208D/B210D RMS @ 1% THD

B212D/B215D

SPEAKER POWER CAPACITY

145 W @ 8 Ω

180 W @ 8 Ω

280 W @ 8 Ω 450 W @ 8 Ω

38W@8Ω

42 W @ 8 Ω

65 W @ 8 Ω 100 W @ 8 Ω

17" 250 W @ 8 Ω

15'

250 W @ 8 Ω

30W@8Ω

-40 dBu to +4 dBu

-40 dBu to +4 dBu

20 kΩ

20 kΩ

Peak power handling 1000 W @ 8 Ω

Peak power handling 1000 W @ 8 Ω

Peak power handling 120 W @ 8 Ω

1/4" TRS jack (servo-balanced)

# 15"/12"/10"/8" 2-Way **Active PA Speaker**

As you can see, "Bass requirements"
isn't quite as easy an answer as it
sounds. The larger a room's cubic
volume, the more energy is required
to achieve a given level of bass. In
other words, when playing the same
tune in a big room versus a small
room, big room = less bass; small

Input Trim	$-\infty$ to $+ 30$ dB
Max. input level	+22 dBu
Max. Input level	+22 ubu
Link	
Connector	XLR connector
LOUDSPEAKER SYS	TEM DATA
B208D/B210	D
Frequency response	65 Hz to 20 kHz
Crossover frequency	2.4 kHz
Sound pressure level	max. 113 dB SPL @ 1 m
Limiter	Optical
Dynamic equalizer	Processor-controlled
B212D	
Frequency response	65 Hz to 20 kHz
Crossover frequency	2.4 kHz
Sound pressure level	max. 125 dB SPL @ 1 m
Limiter	Optical
Dynamic equalizer	Processor-controlled
B215D	
Frequency response	55 Hz to 20 kHz
Crossover frequency	1.9 kHz
Sound pressure level	max. 126 dB SPL @ 1 m
Limiter	Optical
Dynamic equalizer	Processor-controlled
EQUALIZER	
HIGH	12 kHz / ±15 dB
LOW	80 Hz / ±15 dB
POWER SUPPLY	
Voltage (Fuses)	
B208D/B210	D
USA / Canada	120 V, 60 Hz (T 4.0 A H 250 V)
UK / Australia	240 V~, 50 Hz (T 2.0 A H 250 V)

LIIIIILEI	optical	
Dynamic equalizer	Processor-controlled	
B215D		
Frequency response	55 Hz to 20 kHz	
Crossover frequency	1.9 kHz	
Sound pressure level	max. 126 dB SPL @ 1 m	
Limiter	Optical	
Dynamic equalizer	Processor-controlled	
EQUALIZER		
HIGH	12 kHz / ±15 dB	
LOW	80 Hz / ±15 dB	
POWER SUPPLY		
Voltage (Fuses)		
B208D/B210D		
USA / Canada	120 V, 60 Hz (T 4.0 A H 250 V)	
UK / Australia	240 V~, 50 Hz (T 2.0 A H 250 V)	
Europe	230 V~, 50 Hz (T 2.0 A H 250 V)	

100 V~, 50-60 Hz (T 4.0 A H 250 V)

max. 300 Watts

Standard IEC connector

### room = more bass. Confused yet? We suggest that you consult your

BEHRINGER dealer for more advice on this subject, which is also a good time to do a listening test —against their competition and against each other. Judge for yourself. And then own BEHRINGER with money to spare.

#### R212D/R215D

USA / Canada	120 V, 60 Hz (T 6.3 A H 250 V)
UK / Australia	240 V~, 50 Hz (T 3.15 A H 250 V)
Europe	230 V~, 50 Hz (T 3.15 A H 250 V)
Japan	100 V~, 50-60 Hz (T 6.3 A H 250 V)
Power consumption	max. 600 Watts
Mains connection	Standard IEC receptacle
DIMENSIONS/WEIG	HT
B208D	
Dimensions (HxWxD)	14.65 in / 372 mm x 9.80 in / 249 mm x 8.00 in / 205 mm
Weight	14.68 lb / 6.66 kg
B210D	
Dimensions (HxWxD)	18.27 in / 464 mm x 11.50 in / 292 mm x 9.61 in / 244 mm
Weight	18.77 lb / 8.52 kg
B212D	
Dimensions (HxWxD)	approx. 21.7" x 13.6" x 10.6"(approx. 550 mm x 345 mm x 270 mm)
Weight	31.9 lbs / 14.5 kg
B215D	
Dimensions (HxWxD)	approx. 27.2" x 17.3" x 13.2"(approx. 690 mm x 440 mm x 335 mm)
Weight	45.2 lbs / 20.54 kg
sional standards. As a made from time to tir	ttly striving to maintain the highest profes- result of these efforts, modifications may be ne to existing products without prior notice. pearance may differ from those listed or

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Japan

Power consumption

Mains connection

