

EUROLIVE B912NEO B815NEO/B812NEO

DSP-Controlled 1,260-Watt 12"/15"/12" PA Speaker System with Neodymium Speakers and Integrated Mixer

- High-power 1,260-Watt 2-way PA sound reinforcement speaker system with integrated mixer for live and playback applications
- Ultra-compact and light weight plastic composite material provides excellent sound even at extreme sound pressure levels
 - B812NEO weighs only 19 kg/41 lbs
 - B815NEO weighs only 23 kg/51 lbs
 - B912NEO weighs only 19 kg/41 lbs
- Extremely powerful and light weight 12"/15"/12" neodymium woofer provides incredibly deep bass and acoustic power
- Revolutionary Class-D amplifier technology: enormous power and incredible sonic performance
- State-of-the-art 24-bit digital signal processor for ultimate system control:
 - Digital crossover, phase and time correction for perfect driver alignment plus dual compressor/limiter for total system protection
 - Digital noise gate, low-cut filter, 2-band EQ, dynamic Contour filter for ultimate sound reproduction
- 2 Mic/Line inputs (XLR and ¼" TRS) with individual volume controls and peak LEDs
- State-of-the-art 1.75" titanium-diaphragm neodymium compression driver for exceptional high-frequency reproduction



Our EUROLIVE 1,200-Watt NEO Series active loudspeakers are destined to become the new standard in high-quality live sound reproduction. Packed with 1,200 Watts of biamped Class-D output and SMPS (Switch-Mode Power Supplies), these brutes provide massive low-end punch, with the kind of high-fidelity definition and clarity typically reserved for much larger systems. NEO Series loudspeakers provide the best power-to-weight ratio of any speaker system we've created to date!

Class-D Works its Magic

What's the secret? These state-of-the-art active loudspeakers are powered by custom-engineered Class-D amplifiers,

which drive the low- and high-frequency transducers to their limits without even the slightest hint of distortion. Best of all, our Class-D amplifiers use SMPS (Switch-Mode Power Supplies), which don't need massive transformers and heat sinks, making the NEO Series ultracompact and highly-efficient.

Put simply, these cool-running systems provide more Watts per pound, making them easy to transport and set up. Our no-compromise design means you get solid punchy bass, along with powerful mids and pristine highs that will keep the party going all night long.

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EUROLIVE B912NEO B815NEO B812NEO

- Ultra-wide dispersion and large format exponential/conical horn with multi-cell aperture throat
- Additional Line output enables 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
- Ergonomically shaped handles for easy carrying and setup
- Internal switch-mode power supply for noise-free audio, superior transient response and very low power consumption
- High-quality components and exceptionally rugged construction ensure long life
- Conceived and designed by BEHRINGER Germany

NEO-What?

Since its discovery in the 1800s, scientists have been playing with neodymium, a rare-earth element prized for its powerful magnetic properties and super-light weight. Our engineers have harnessed the power of neodymium, creating some of the best-sounding, featherweight transducers (woofers and tweeters) known to man.

Custom-Designed Transducers

Let's face it; the transducer (speaker) is 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 grab whatever they have on hand and plug them into their boxes, we build our transducers from scratch. Not only do we wind our own voice coils, we process the paper pulp into cones and even machine the frames and back plates. This enables us to control the quality, and frankly, make better components—like the neodymium woofers and 1.75" neodymium titanium-diaphragm compression drivers we deploy in each and every NEO Series loudspeaker.

More than a year went into the creation of the multi-cell aperture horn/neodymium titanium-diaphragm driver combination that not only does justice to loud rock and dance music, but also satisfies audiophiles with its musical timbre and attention to detail.

The resulting HF horn dispersion pattern ensures that everyone in the performance area hears the same high-quality sound. No corners cut here!

Digital Signal Processing

From the instant the signal enters the NEO system, the digital processor takes over, ensuring the highest possible signal integrity—and we're talking CLEAN! The 24-bit DSP (Digital Signal Processor) includes a digital crossover, phase and time-optimization for perfect driver alignment, and a dual compressor/limiter for total system protection. Two-band EQ (High and Low) is provided for finetuning system response, along with an adjustable Low Cut filter, a switchable dynamic Contour filter (Speech or Music) and a digital Noise Gate with Threshold LED.

Power to Spare

Cutting-edge technology and high fidelity transducers are not all it takes to get your message across—you need power, and lots of it. At the heart of each of these systems is a biamped 1,200-Watt engine capable of driving the speakers to their very limit, without the slightest hint of distortion. When it comes to pure output power, NEO Series loudspeakers will simply blow you away with their massive punch, smooth mids and articulate top-end!

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EUROLIVE B912NEO B815NEO B812NEO

Instant PA System

With just a single NEO loudspeaker system and one or two dynamic microphones, you can set up an instant sound system. The onboard mixer features a Level control for each input and a dual-band master EQ, complete with an adjustable Low Cut filter to help eliminate annoying breath pops and mic handling noise. An additional filter, which we call Contour, allows you to select Speech (for enhanced voice intelligibility), or Music for the broader frequency range required for the high-fidelity reproduction of music. And if you need more coverage, you can chain together as many as you like via the convenient Line Out XLR connector.

Low Frequency Response

The EUROLIVE NEO Series was built with extended low frequency handling in mind. Thanks to a tuned port, internally braced, injection-molded enclosure, each model's custom-designed LF (Low Frequency) transducer really cranks out tight bottom 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.

Why Are There Two 12" Versions in the Neo Series?

From a technical and functional aspect, the B812NEO and B912NEO are identical. They have exactly the same amplifiers, transducers, DSP, frequency response and basic construction. The B912NEO is designed for applications where a more conservative appearance may be desired, such as in churches, restaurants, businesses, etc.

Which One Do I Need, the 12" or 15"?

As you've probably noticed, we make these in two woofer sizes. Which one is right for your application? 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 act?
- Loud enough for an 18-year old, or loud enough for your grandmother?
- Is your venue a huge auditorium or a tiny club?

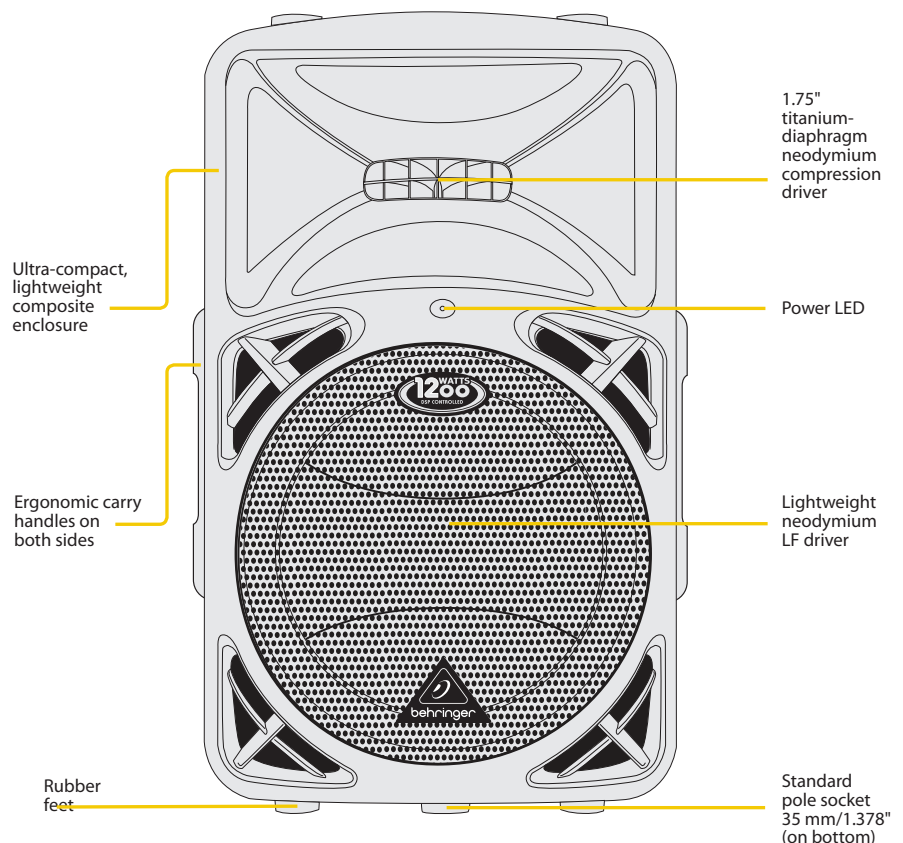
First, let's establish one thing—both models put out plenty of bass. But physics are physics and a 15" low frequency transducer has almost 40% more surface area with which to move air than a 12". So with a 15" loudspeaker, you can move more air with the same amount of power and generate more bass.

If you're amplifying a sales presentation with a single mic in the boardroom, or an acoustic guitar at the coffee house, the B812NEO or B912NEO will probably be all the speaker system you'll ever need. But if your music has

more bass in it — or you want to crank it up louder, then the B815NEO may be a better choice. Up to a point...

The larger a room's cubic volume, the more energy is required to achieve any given desired level of bass. In other words, when playing the same music in a big room versus a small room, big room = less bass; small room = more bass. For really large performances or venues, you may find that you will need to add subwoofers to your setup to achieve the desired level of bass impact. But more on that later...

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EUROLIVE B912NEO B815NEO B812NEO

More Than Just a PA Loudspeaker...

When laid on their side, NEO Series loudspeakers tilt to the ideal angle for onstage monitor wedge applications. Hookup is simple, requiring only a single cable from the monitor send on the mixing console and, of course, power. Additional monitors can be chained together via the XLR Line Out jack on the loudspeaker's rear panel.

NEO Series loudspeakers also make excellent onstage monitors for keyboards, acoustic guitars, or any line-level instrument for that matter. You can plug your instrument into

Mic/Line 1 and use the Mic/Line 2 input to connect the monitor signal from the PA mixing console, so that you can also hear the other members of your band. This opens up lots of possibilities. If you want to use more than two instruments, you will need a submixer (e.g. XENYX X1204USB) to mix down the signals to one feed.

Conservation of Energy

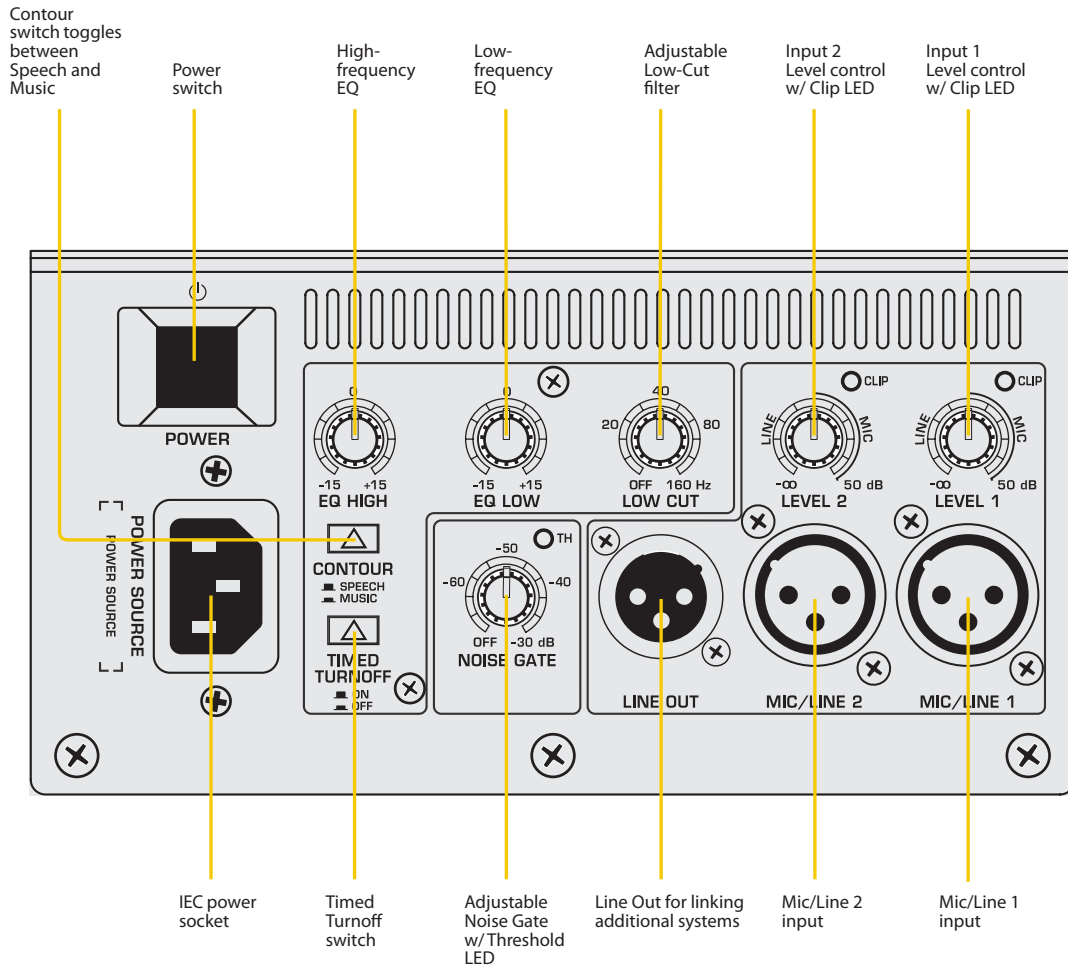
Because of the NEO Series' high-efficiency Class-D amplifier and switch-mode power supply technology, these loudspeakers waste less energy than conventional active systems, putting out more sound and generating significantly less heat! For even more energy conservation, each NEO loudspeaker has a handy Timed Cutoff

switch that puts the system into standby mode when no signal is detected for more than three (3) minutes.

Value

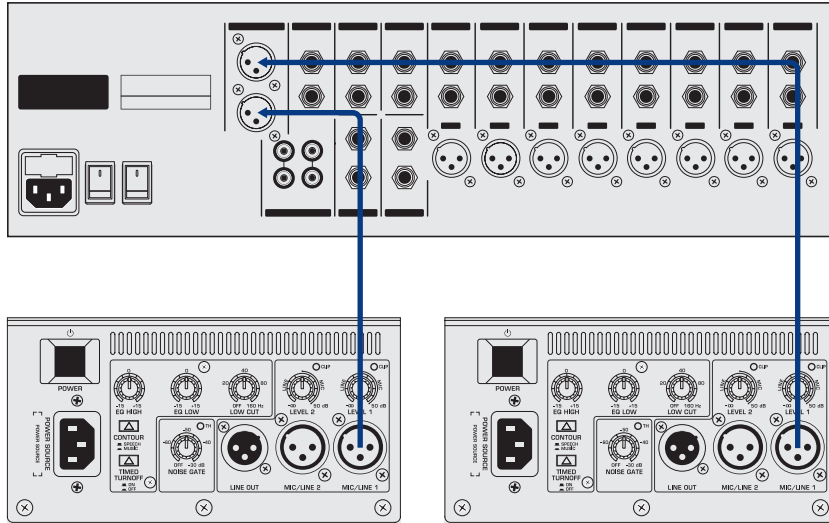
When it comes to serious bang for your buck, it's hard to beat the NEO Series—and the sound quality is second to none! Stop by your BEHRINGER dealer today, compare them to the competition and find out how easy it is to take home a pair.

For a rump-shaking romp into sonic wonderland, team up a pair of NEO Series loudspeakers with our amazing new active subwoofers, the B1500D-PRO or B1800D-PRO. Be sure to check with local authorities to make sure you're nowhere near a seismic fault. These babies really rock!

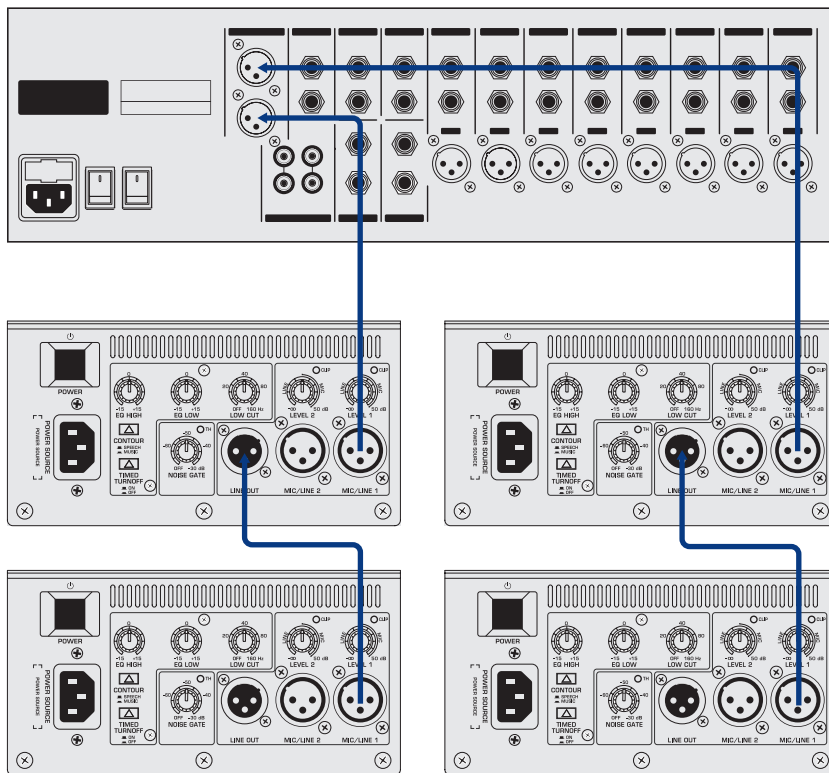


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Stereo PA with External Mixer

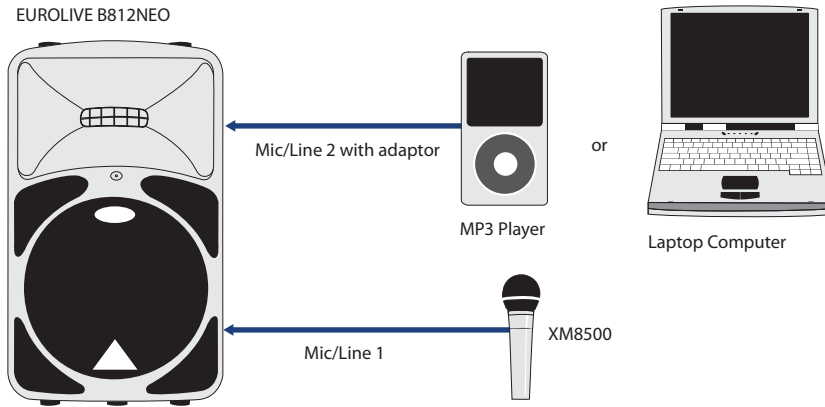


Connecting Multiple NEO Systems

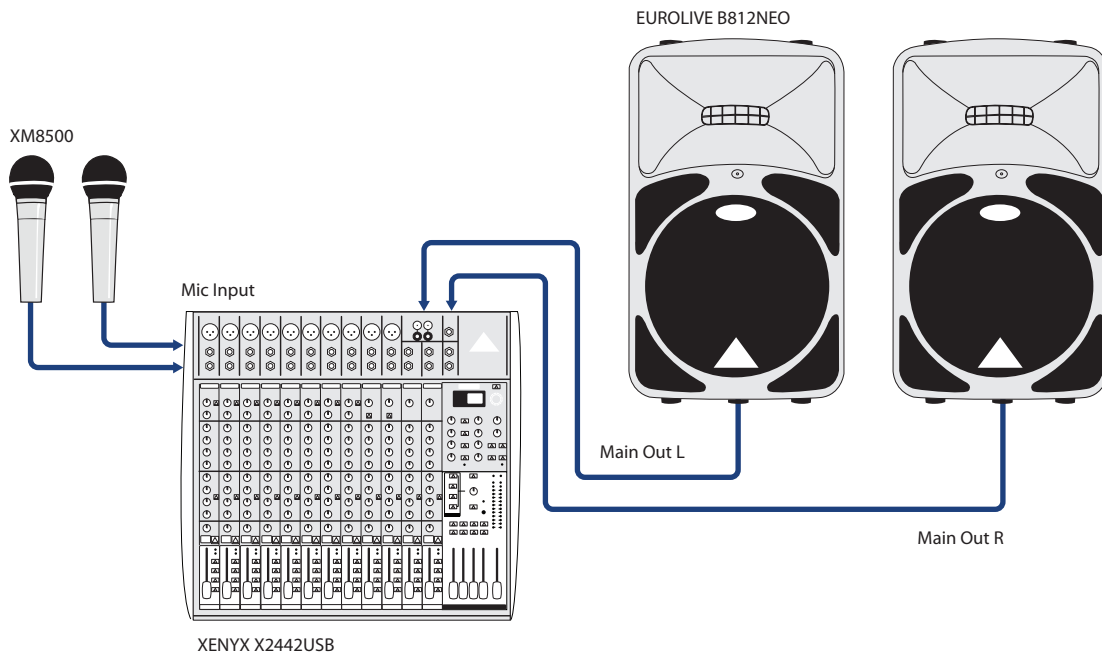


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Presentation with 1 Mic & Music/PowerPoint Sound

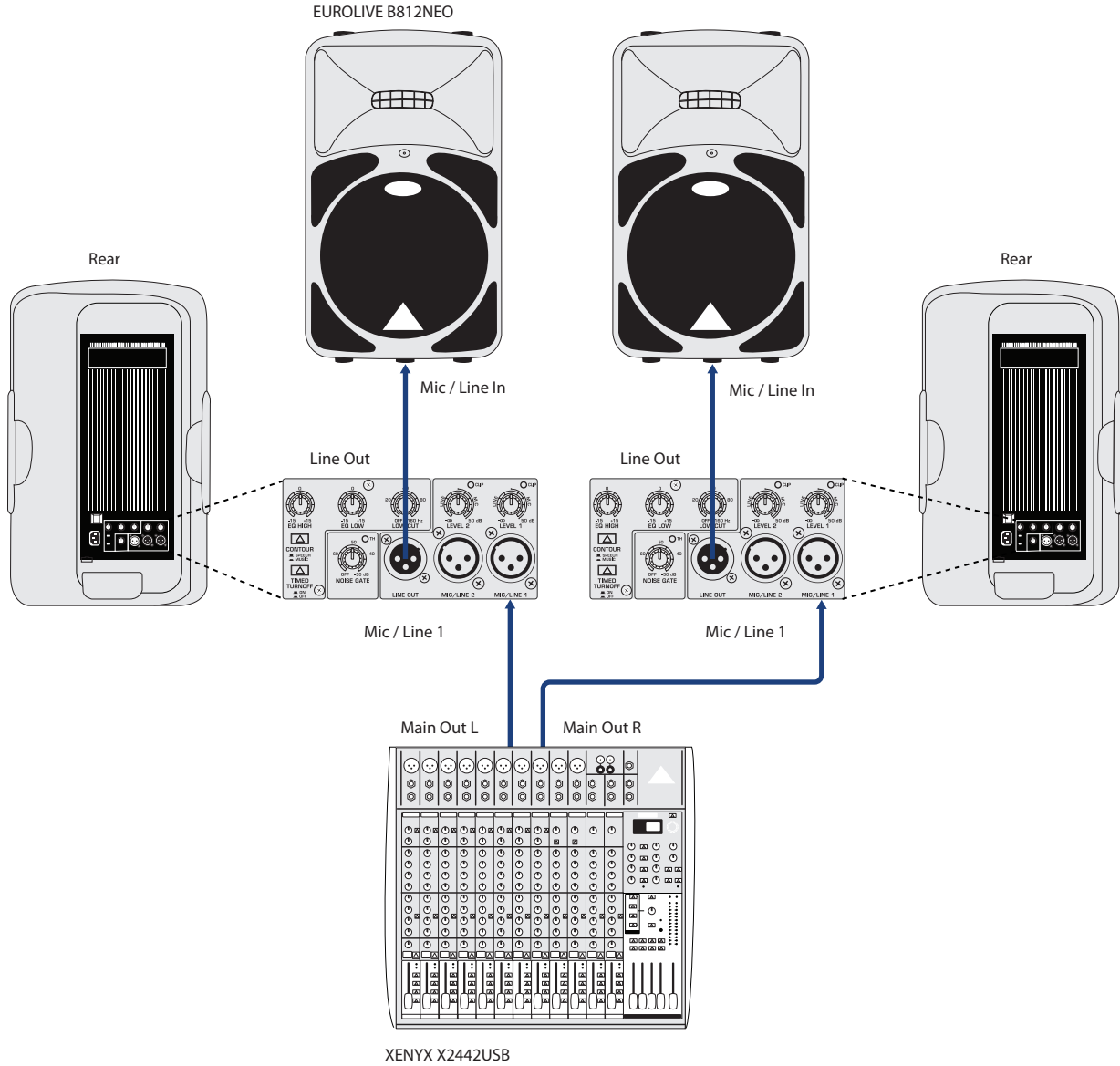


Stereo Operation with External Mixer



EUROLIVE B912NEO B815NEO B812NEO

Connecting Additional NEO Loudspeakers



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B912NEO/B812NEO

OUTPUT POWER

Low-frequency range

RMS @ 1% THD	800 W @ 8 Ω
Peak power	1200 W @ 8 Ω

High-frequency range

RMS @ 1% THD	50 W @ 8 Ω
Peak power	60 W @ 8 Ω

AUDIO INPUTS

XLR (servo-balanced)	Channels 1 and 2
Sensitivity	-40 dBu to +10 dBu
Input impedance	27 kΩ

Level control	Channels 1 and 2
Input Trim	-∞ to +50 dB
Max. input level	+22 dBu

B815NEO

OUTPUT POWER

Low-frequency range

RMS @ 1% THD	800 W @ 8 Ω
Peak power	1200 W @ 8 Ω

High-frequency range

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Peak power	60 W @ 8 Ω

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XLR (servo-balanced)	Channels 1 and 2
Sensitivity	-40 dBu to +10 dBu
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Level control	Channels 1 and 2
Input Trim	-∞ to +50 dB
Max. input level	+22 dBu

AUDIO OUTPUTS

LINE OUT	XLR, balanced
Output impedance	120 Ω

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Output impedance	120 Ω

CONTROLS

Digital Signal Processor	24-bit fixed-point Motorola
AD/DA converter	24-bit / 48 kHz
NOISE GATE	variable (off to -30 dB < -45 dB)
TIMED TURNOFF	switchable (3 min.)
CONTOUR	switchable SPEECH / MUSIC contour
HIGH	12 kHz / ±15 dB
LOW	80 Hz / ±15 dB
LOW CUT	hi-pass filter, 40 - 160 Hz (24 dB / Oct.)

LOUDSPEAKER SYSTEM DATA

Frequency response	45 Hz to 20 kHz
Crossover frequency	1.54 kHz
Sound pressure level	max. 127 dB SPL @ 1 m
Tweeter	1.75" / 44 mm, neodymium titanium-diaphragm HF driver

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Digital Signal Processor	24-bit fixed-point Motorola
AD/DA converter	24-bit / 48 kHz
NOISE GATE	variable (off to -30 dB < -45 dB)
TIMED TURNOFF	switchable (3 min.)
CONTOUR	switchable SPEECH / MUSIC contour
HIGH	12 kHz / ±15 dB
LOW	80 Hz / ±15 dB
LOW CUT	hi-pass filter, 40 - 160 Hz (24 dB / Oct.)

LOUDSPEAKER SYSTEM DATA

Frequency response	40 Hz to 20 kHz
Crossover frequency	1.54 kHz
Sound pressure level	max. 128 dB SPL @ 1 m
Tweeter	1.75" / 44 mm, neodymium titanium-diaphragm HF driver
Woofer	15" / 387 mm neodymium LF transducer
Limiter	Optical, dual protection for woofer and driver
Dynamic equalizer EQs	Processor-controlled, dual parametric EQs

Woofer	12" / 308 mm neodymium LF transducer
Limiter	Optical, dual protection for woofer and driver
Dynamic equalizer	Processor-controlled, dual parametric EQs

POWER SUPPLY / VOLTAGE (FUSES)

USA / Canada	120 V~, 60 Hz (T 10 A H 250 V)
UK / Australia	240 V~, 50 Hz (T 5.0 A H 250 V)
Europe	230 V~, 50 Hz (T 5.0 A H 250 V)
Japan	100 V~, 50-60 Hz (T 10 A H 250 V)
Power consumption	max. 1000 Watts
Mains connection	Standard IEC connector

DIMENSIONS/WEIGHT

Dimensions (HxWxD)	26 x 15 x 15.5"/660 x 380 x 395 mm
Weight	42 lbs/19 kg

POWER SUPPLY / VOLTAGE (FUSES)

USA / Canada	120 V~, 60 Hz (T 10 A H 250 V)
UK / Australia	240 V~, 50 Hz (T 5.0 A H 250 V)
Europe	230 V~, 50 Hz (T 5.0 A H 250 V)
Japan	100 V~, 50-60 Hz (T 10 A H 250 V)
Power consumption	max. 1000 Watts
Mains connection	Standard IEC connector

DIMENSIONS/WEIGHT

Dimensions (HxWxD)	29 x 17 x 18.5"/735 x 430 x 470 mm
Weight	51.1 lbs/23.18 kg

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