

JBL Synthesis System Certification – Why it Matters

By Dave Tovissi

Weeks after our highly effective immersive cinema demonstrations at CEDIA Expo last month, I have spoken with several dealers and distributors about our Certified Systems program for JBL Synthesis. Whilst some of these conversations were centered around “Making Exceptions” versus “Making Exceptional Sound,” all these conversations led to a better understanding by all parties as to why certification matters.



Born out of Hollywood’s desire for cinema sound at home, JBL Synthesis has a rich history with the film industry. Building upon our extensive heritage in cinematic sound, Lucasfilm selected JBL to develop the first commercial THX®- licensed cinema speaker system in 1983. Nine years later, JBL Synthesis released our first THX home theater system.

Today, JBL Synthesis offers the most advanced multi-channel audio systems available in the industry. Every component of our systems leverages the latest in audio innovation and our signature sound to ensure exceptional performance in any home theater. With the ability to scale from small, intimate spaces to the largest private home cinemas, JBL Synthesis systems are designed and engineered to work together to create an immersive experience where all components function as one sound.



Recreating the commercial cinematic experience in a home requires the manufacturer, distributor, and dealer to work together as one, ensuring that the same stringent standards used in commercial theaters are applied as well. These standards include following all the commercial cinema requirements for signal processing, amplifier power, loudspeaker and subwoofer placement, timbre matching and final system calibration. When all these standards are followed, any home theater system regardless of size and budget will sound amazing.

That is why JBL Synthesis encourages our dealers to follow the standards being used in commercial theaters for all their residential installation. Taking another step further, we have created a process to certify your installations to our system standard. We recognize two levels of certified systems. JBL Synthesis Certified System and JBL Synthesis Certified Elite System. The main differentiations in the two levels are the number of channels being processed and/or the type of calibration required. If your system employs our JBL Synthesis SDP-75, it will likely qualify as a Certified Elite system.

The JBL Synthesis Certified and JBL Synthesis Certified Elite program was the first of several initiatives that came out of the JBL Synthesis Product Council feedback sessions. Dealers and Distributors from across the globe make up the members of the Product Council. Their participation and feedback in the product council helped us create the Certification Process and provide us with the future direction of JBL Synthesis products and system solutions.

Harman Luxury Audio announced that the Adeo Group in Lavis, Italy, was the first showroom that had met the qualifications and had been certified as a JBL Synthesis Elite System. The Adeo Group is a distributor. They have been a champion of the brand and the certification initiative. Their immersive cinema is used for prospective client demonstrations and dealer training events as well.



Certifying a JBL Synthesis system for your showroom or your customers requires a little planning by the dealer. We ask that you only use JBL Synthesis products in your audio design, that you document the installation with pictures, and that you send us your system calibration files. By meeting the standards set by JBL Synthesis you will be providing consumers with confidence that their system will deliver the intended sound quality in their unique room environment; essentially, it signifies a level of expertise beyond just selling the products and allows dealers to showcase their ability to properly set up immersive JBL Synthesis systems.

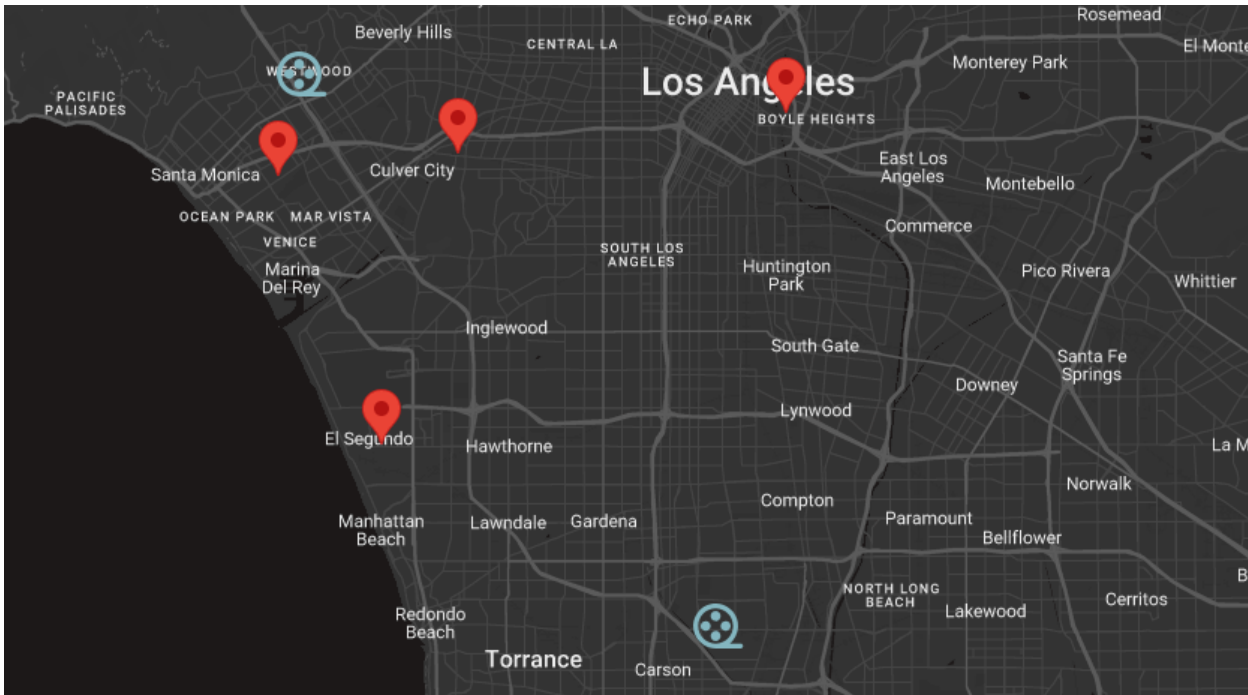
We recognize that some of our dealers have installed their JBL Synthesis theaters in the past using other HARMAN Luxury Audio products. Please work with your distributor or your regional sales manager to replace those products with a JBL Synthesis product to qualify for certification.

Now that you know the “why” and the “how” to certify a JBL Synthesis System, if you have a system that you want to certify, click this link to start the application process. <https://www.jblsynthesis.com/certified-systems.html>.

As an incentive for doing what is necessary for certifying systems, we will provide you with a special rack face that you can proudly exhibit in the equipment rack. They are backlit with the iconic JBL Synthesis blue LED lights which can be turned off and back on by most control systems.



We will also feature your business on the JBL Synthesis website as a JBL Synthesis Experience Center. The movie reel icon on the Dealer Locator differentiates Authorized Experience Centers from other JBL Synthesis dealers.



We look forward to assisting you in certifying your JBL Synthesis systems in the future. If you have any questions about the program or have ideas as to how to make it better for you and your customers, please email at david.tovissi@harman.com.

Dealer Profile: Auditorium

On 4 July 1981, Leonhard Schwarte founded the Hi-Fi shop 'Auditorium' on Feidikstraße in Hamm, Germany. From the very beginning, the focus was not only on listening to music with passion, but also on listening in order to offer customers the best possible solutions - and there

have always been many of these in the selected range.

How many people are on the team?

50 employees at three locations

Thoughts on the importance of training?

Product training is essential in the Hi-Fi sector. Audio equipment is often technically complex and without solid training it is difficult to advise customers properly. It's not just about understanding functions, but also knowing the differences between brands so that you can make suitable recommendations. In addition, sound advice improves customer satisfaction enormously - they then know how to get the best out of their device. At the same time, training helps to keep pace with new technologies and avoid complaints. Ultimately, both customers and retailers benefit from this.

What do you like most about HARMAN Luxury Audio products and which lines do you feature?

In our opinion, HARMAN Luxury Audio products are particularly impressive because of their sound quality and well-thought-out design. The combination of innovative technologies such as Dirac Live, which adapt the sound perfectly to the room, and an appealing design is also outstanding. The products offer a good combination of technology and aesthetics.

We stock the JBL Summit Series, the Studio Monitors Series, of course the Classic Series, the HDI Series, and the Stage XD Series as well as a selected range from ARCAM and Mark Levinson.

How do you think the luxury audio industry is currently doing?

The luxury audio industry continues to show encouraging growth, driven largely by the increasing demand for high quality audio and video formats. One notable trend is the focus on connected, compact devices, such as Wi-Fi enabled speakers and soundbars, which are particularly popular with younger buyers. This target group is also strongly attracted by modern headphones that offer both sound quality and convenience and can be seamlessly integrated into the digital lifestyle. The industry is thus adapting to the changing needs and preferences of consumers and remains on course for growth.

Tell us about your mission statement.

From the very beginning, everything at Auditorium has revolved around a passion for music and an unforgettable listening experience. Our aim is not only to offer the best hi-fi and home cinema solutions, but above all to listen in order to meet the individual needs of our customers. We are proud of our carefully selected range, which has offered a variety of solutions from the very beginning.

We want to inspire both experienced audiophiles and younger music lovers with appealing

hi-fi products. Music and audio are our passion, and we do everything we can to provide our customers with the best possible support, including in the area of service. Anyone who buys from us can rely on the expertise of our audio technicians, who are ready to help with the selection and integration of audio systems in any room.

At Auditorium, we combine first-class products with personalised advice and comprehensive service to create a unique sound experience that delights everyone.

You have the floor. Anything else you want to share with us about (insert dealer name) that you would like the world to know?

The Auditorium is constantly growing and evolving! This year, for the first time, we organised our own in-house hi-fi trade fair: the Auditorium Sound Days. This fair is not just an ordinary demonstration fair; it offers a unique platform for intensive discussions, fascinating hi-fi experiences and hands-on workshops.

MA & Stage 2 New York Press Event

By David Glaubke

After July's successful Hollywood launch of the JBL Stage 2 MA, and its recent CEDIA show debut, we set off to New York to introduce the product to consumer lifestyle and tech press.

In collaboration with Universal Music Group and Dolby Atmos, we conducted a two-day media event at the renowned Republic Studios, the recording home of Republic Records represented by the likes of Taylor Swift, Micki Minaj and Post Malone.

This exclusive venue, located in the Chelsea neighborhood of Manhattan, was the perfect venue to conduct Stage 2 MA media evaluations as it tied into JBL's longstanding contribution to the recording industry, from content creation through to the living room.

We created both a two-channel and multi-channel systems within the studio's artist lounges. The engineers at the studio, who mix in Dolby Atmos, so loved the system that they asked we leave it behind so they can play Atmos mixes for their artists as it would be heard in a living room. Born is the JBL Lounge at Republic Studios, New York.

The response from the press in the room was equally enthusiastic, especially from those who will, for the first time, introduce their readership to high-quality, accessible and well-designed component audio.

From Techlicious & MSM: “If you are looking to take your home audio to the next level – beyond a soundbar – I’d recommend demoing one of JBL’s setups. Whether it’s for movies, music, or gaming, their new systems offer a balance of performance, style, and user-friendliness that’s hard to beat.”

Or, from TechRadar: “They say that the high-end audio business is doomed as the younger generation is unwilling to upgrade their home audio gear due to the costs and inconveniences of separate components. With the Modern AVRs and Stage 2 Speakers, JBL has made getting better sound painless, both for consumers and their wallets.”

Writers representing more than 20 publications, including CNET, Esquire Magazine, and G Style Magazine, were on-hand and coverage will roll out over the next several weeks. Check out some of the latest coverage in our From the Audio Files feature in this edition of the newsletter.

Meet The Harman Luxury Audio Team Interview Form

Bio:

Name: Chris Alexander (Zander)

Position/Job Title: Senior Software Engineer Manager

With Harman Since: Aug 2024

Interview:



How would you describe what you do in your current role?

I work with internal and external software engineers and help define and shape software related deliveries for the Luxury Audio team. I also work on continuous improvement (quality and ways of working).



What did you study in school? Did you always imagine yourself doing something like what you’re doing now or did the fates just take you in that direction?

I studied software engineering at University. I was always fascinated by technology and science. It was only during my A'levels that I really thought about computer science / programming - It seemed like solving mini-puzzles! However, I didn't own a computer so I kind of went into University with limited exposure before actually studying it. I am glad I did because software power so much of the modern world



How did your career path lead you to Harman?

As a software engineer, I have always worked closely with hardware. My first role in Audio was with Tymphany in Guangdong. As many will know the audio space is full of crossed paths and so when I saw an opportunity to move back into this space, and work with people I knew, while joining such a prestigious brand, it made sense.

What is the most important thing you have learned over your career?

Assumptions get you so far but knowing your customer is vital to building something that will be loved (and used). I have had the opportunity to work across a diverse range of products and customer profiles. Working as part of the luxury team I am again listening and learning about a new set of customers.



Any other advice you would share with people just starting out in this industry?

Like most of the modern world – don't compare yourself to everything you see on the internet. You cannot master all forms of software at once. Find what area you like the most and focus on that. You can always move – just don't try to do it all at once!



On to more questions about you the person, rather than you the worker.

What are you most proud of in your life?

A few things stand out as high points but one I can easily point to was reorg'ing an engineering dept and getting the first new product out of the team in 5 years – on time & feature complete. This was a great achievement because of the output but also because of the journey the team went on. It was highly collaborative and positive. A quite young team, I am sure the experience really helped the individuals grow and learn.



When did you realize you had a passion for music or audio? Was there any one band, song, or movie that did it for you?

My passion for audio comes from what it can do beyond be a form of media. It invokes memories (good and sad), gets us moving, brings us together, helps us study and can be used for relaxation, mediation and even as a clinical form of therapy. Its amazing what music / audio can do to / for us!
Also (in a former role) I worked in hearing loss prevention – it makes you really think (and cherish) the ability to hear, listen and communicate.

What current technology impresses you the most?

I am not sure “impresses” but intrigues me – hydrogen fuel & sodium batteries. Having recently worked in climate tech I see there is some exciting applications / gaps that can be filled in the renewable revolution. From an audio point of view – spatial audio is something I'd like to understand more about – both from a pure technology PoV as well as how we perceive it.

Rapid Fire Questions



Favorite music genre?

Rock (but also anything really)



The desert island question, of course. If you were marooned for eternity & could listen to only 3 albums, what would they be?

Does the lofi girl youtube channel count?

The color and the shape – Foo fighters

Nevermind – Nirvana (reminds me at being around my friend playing GoldenEye on N64!)



You have the floor. In closing, tell us anything else you want us to know about yourself.

I live in North London with my wife Shirley and our cat Mooncake. I enjoy most nerdy things – particularly I paint miniatures. I lived (and met my wife) in China – we are now experiencing the other half of the cultural mix by living here in Europe – we still have plenty of Europe (and China) respectively to visit however.

Mooncake:



Tech Talk

Ported Enclosures – Why Do We Use Them?

By Mark Glazer, Senior Principal Engineer, Revel Speakers

What are ported box loudspeakers?

Ported, also called Vented box loudspeakers, are a common staple among Luxury Audio free standing speaker systems. To understand how a ported box performs, let's use a drinking bottle as an example (Figure 1). Have you ever blown across the neck opening? If so, you know a **is** tone generated known as the resonant frequency, F_s . The narrow neck of the bottle represents the vent diameter and length, and the volume of the bottle below represents the enclosure. The ratio of the neck cross sectional area and length, plus volume parameters determine the resonant frequency tone. This device is called ~~the~~ **a** Helmholtz resonator. This is why filling up the bottle partially would produce a higher frequency tone.

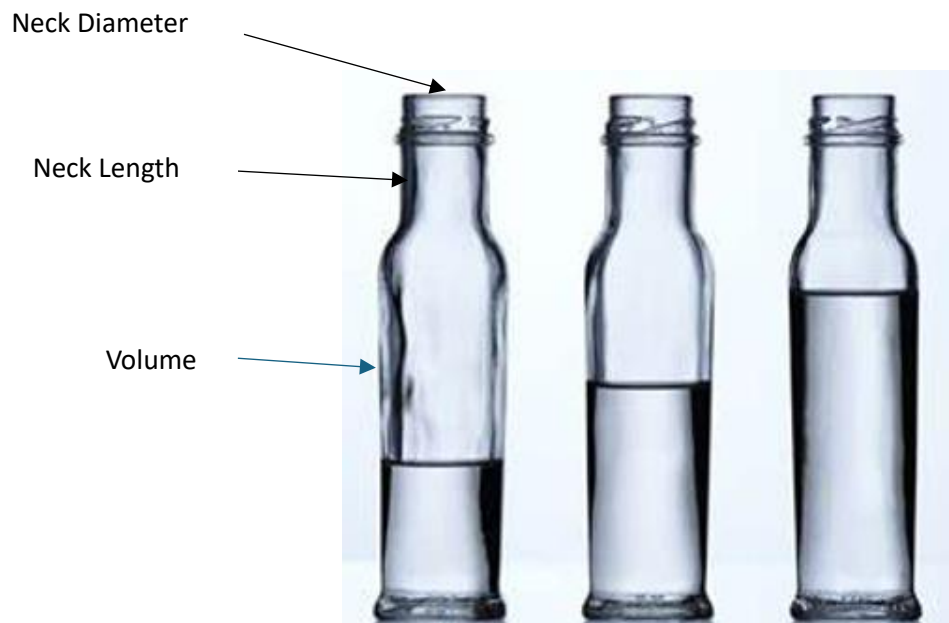


Figure 1: Drinking Bottle Analogy

Now let's apply the 'water bottle' principal to the loudspeaker enclosure.

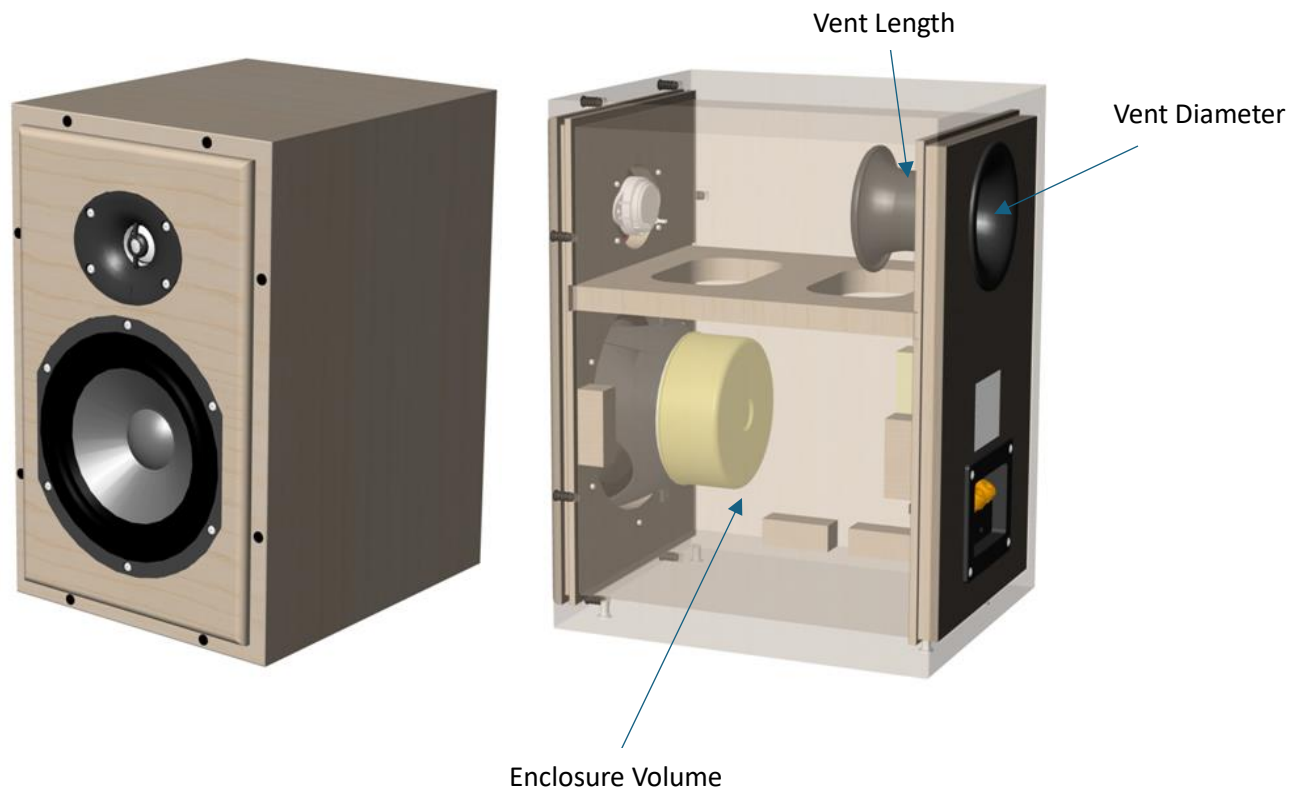


Figure 2: Loudspeaker Enclosure

Once the enclosure volume is determined, the maximum output level and low frequency range of the system is tuned by changing the length and diameter of the port.

Now let's examine the separate output responses of the port and woofer, plus the total system output, using the Revel F126Be 2-way Bookshelf for an example. (Figure 3)

As the frequency reduces, the woofer output and excursion begin to drop below 90 Hz due to the air stiffness of the enclosure. During the same period, the port output begins to increase as it approaches the Helmholtz resonance range of frequencies. The overall sum of woofer and vent has higher low frequency output than just a sealed box. Also, a vented system has lower distortion, plus the dynamic range is increased due to the port being more linear than the woofer at these frequencies.

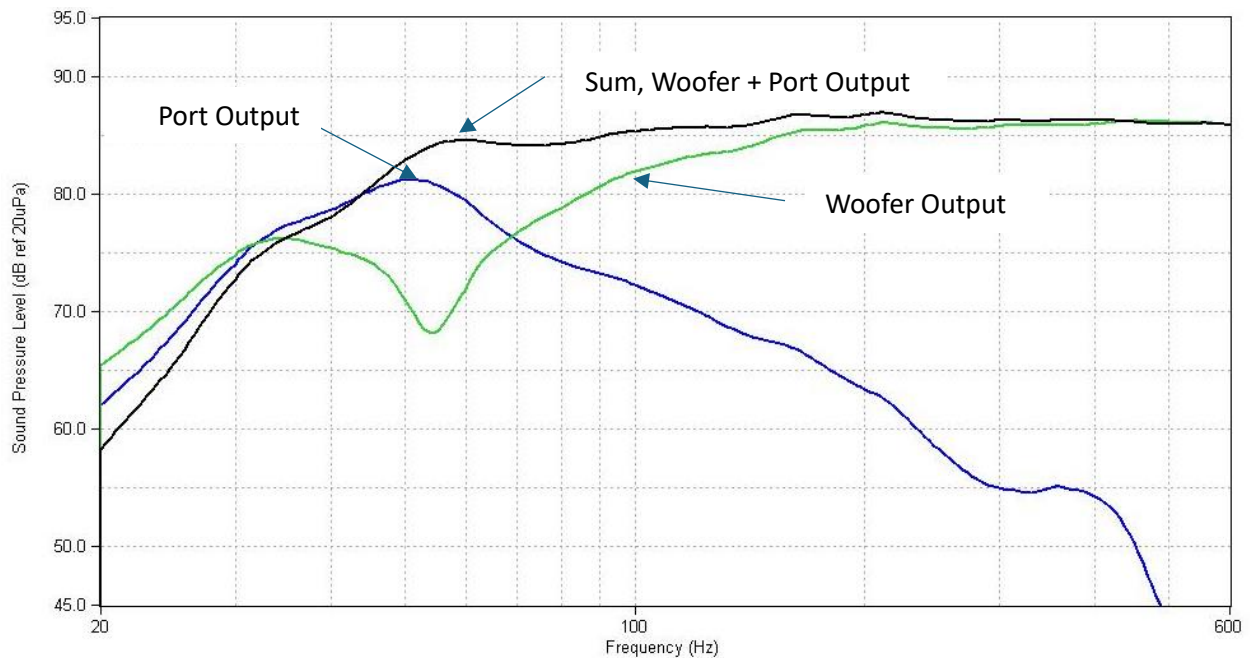


Figure 3: Revel F126Be Woofer, Port and Sum Outputs

Below the port resonance frequencies, the summed output tends to roll off more rapidly, therefore ports **are** not used for certain subwoofer applications. Also, for very small enclosures a port may not be physically practical.

Conclusion:

This article explains why ports are used, not only in Luxury Audio loudspeakers but widespread in the loudspeaker industry.

Luxury Audio Engineering further refined port technology improving dynamic range and lowering distortion by contouring port shapes. One example is the patented Constant Pressure Gradient Port implemented in **some** Luxury Audio loudspeakers (Figure 4).



Figure 4: Constant Pressure Gradient Port

November Newsletter 10/25/2024

Training Tips

The Basics of Immersive Sound and Room Calibration

By Michael Strange, Senior Global Product Line Manager

Riding on the successful launch events of the Stage 2 Loudspeakers and MA AVR's, we are pleased to announce the first training module of our two-part series **How to Bundle JBL MA AVRs and Stage 2 Loudspeakers for Optimal Customer Satisfaction**. Now available at Harman University, *Part 1: The Basics of Immersive Sound and Room Calibration*, will help you learn or refresh your knowledge and help you sell more products. The course provides the tools and confidence needed to easily craft the ideal solution for your customers.

The course teaches the Evolution of Multi-Channel Sound and provides the fundamentals of:

- Mono to Stereo
- Hearing in the Real World
- Increasing Immersion
- Immersive Formats
- Channel Breakdown
- System Electronics
- Room Acoustics and Treatment

You may access this and all the training courses by clicking [here](#).

Once you sign in, if these courses are not populated on your home page, click "Go to Courses" to sign up. The second module of the series; Interactive System Builder is scheduled for release next month.

HARMAN Luxury Audio

October 2024 Newsletter

Here is the press coverage coming out of the JBL MA & Stage 2 Press Event in New York City.

October 23, 2024

WiFi HiFi

Holiday Gift Guide 2024: Gifts for Home Entertainment

JBL MA & Stage 2

<https://wifihifi.com/wifi-hifi-holiday-gift-guide-2024-gifts-for-home-entertainment/>

October 22, 2024

Best of High End

JBL Modern Audio event: Reimagining the home theater experience for Gen Z

<https://bestofhighend.com/jbl-modern-audio-event/>

October 22, 2024

Sound Advice

JBL MA9100HP and Stage 2

<https://www.sound-advice.online/product-reviews/jbl-ma9100hp-and-stage-2>

October 22, 2024

MSN

JBL Reimagines Home Audio with Stylish, User-Friendly Component Systems

<https://www.msn.com/en-us/news/other/jbl-reimagines-home-audio-with-a-stylish-userfriendly-component-system/ar-AA1sl1Ej>

October 21, 2024

Gizmodo

JBL's Newest Home Theater Setup Let Me Hear My Favorite Song's Most Subtle Details

<https://gizmodo.com/jbls-newest-home-theater-setup-let-me-hear-my-favorite-songs-most-subtle-details-2000513337>

October 18, 2024

Techlicious

JBL Reimagines Home Audio with Stylish, User-Friendly Component Systems

<https://www.techlicious.com/blog/jbl-stage-2-speakers-modern-audio-av-receivers/>
