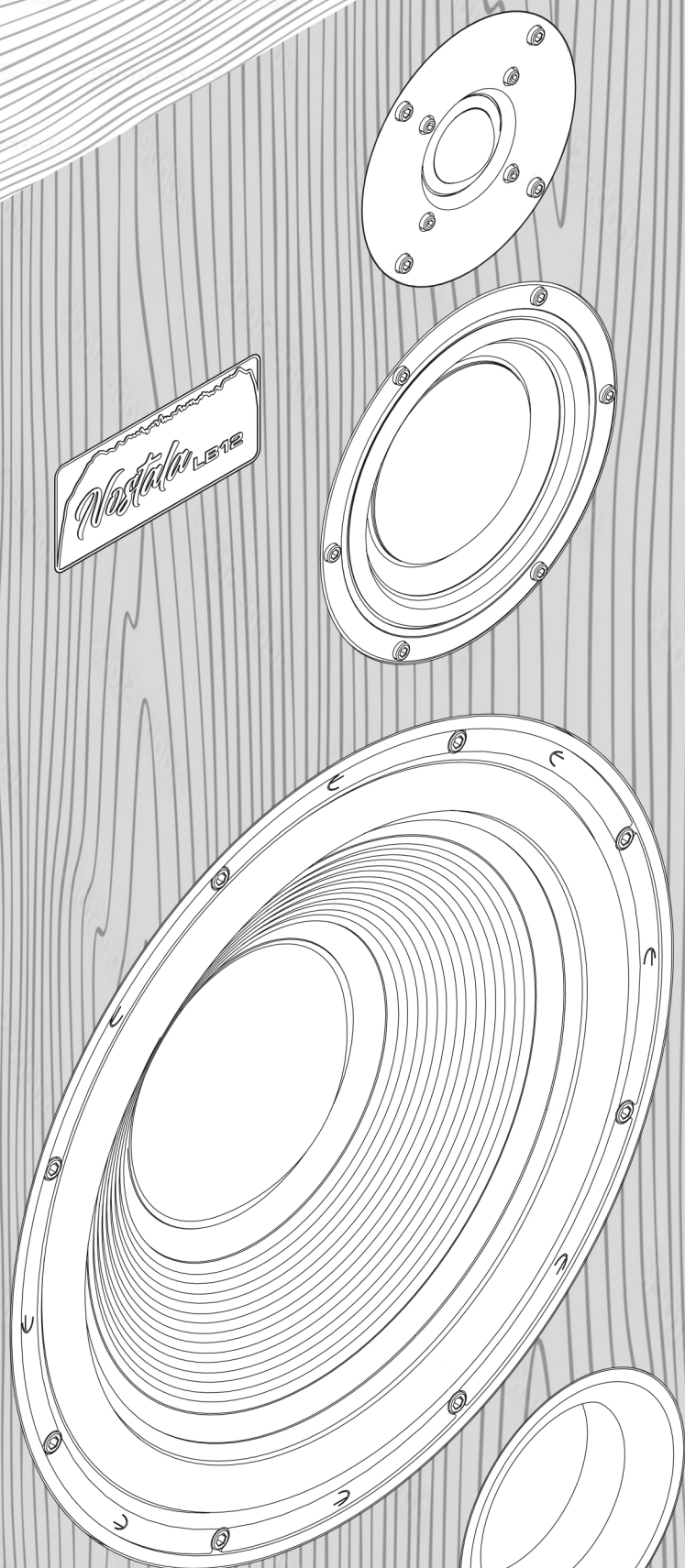


Emotiva®

Vostala

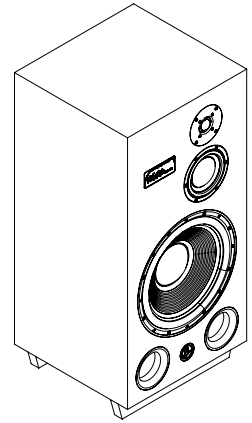
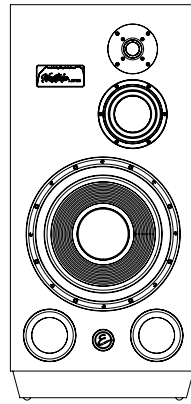
LB12

3-Way Loudspeaker User Manual



Emotiva®

Nostala LB12



Nostala LB12 Speaker

Contents

Nostala LB12 Speaker	1
Introduction.....	3
About This Manual	5
Features	6
Unpacking.....	7
Specifications	8
Design Highlights	9
Setup	13
Speaker Placement.....	14
Care and Maintenance.....	15
Emotiva Audio Corporation Ten-Year Limited Warranty	16
Notes	19



Introduction

Thank you for purchasing your new Emotiva Nostala LB12 loudspeakers.

The LB12 is a modern reimagining of a classic three-way ported loudspeaker. It combines a vintage design aesthetic with modern materials, engineering, technology, and components, giving you the best of both worlds.

The LB12 sports the sort of looks and finish you would expect from a fine vintage loudspeaker. Every surface is covered with genuine hand-applied furniture grade walnut veneer. Integral floor stands position the speaker at the optimum angle for seated listening. The fully finished front panel proudly displays a pair of recessed solid cast metal emblems; one bearing the Nostala insignia and the other the iconic Emotiva logo. Even though we love looking at the front panel of the LB12, we've included two grills with each, one in beige and the other in neutral grey, both of which fasten precisely and firmly in place with powerful hidden magnets, to help ensure that the LB12 fits seamlessly into any room decor.

On the inside, the LB12 features thoroughly modern and upgraded versions of the drivers you might expect to find in a classic loudspeaker. The high frequency driver is a state-of-the-art version of the classic 1" silk soft dome tweeter. The midrange driver is our unique HyperDome™ driver, which utilizes cutting-edge technology to deliver the sonic character of a classic dome midrange, but with a more powerful magnet structure and lower resonance, for significantly reduced coloration. The low frequency driver is an updated version of a classic 12" paper cone woofer, with a low moving mass and powerful motor assembly, which delivers the punch and clarity you'd expect from a great vintage speaker. The massive cabinet is critically braced, and acoustically damped, to eliminate even the slightest trace of unwanted vibration, and tuned for optimum bass response and clarity via dual flared front ports.

And, finally, we've included something that a lot of people miss from "the good old days". The LB12 includes a pair of metal toggle switches that enable you to independently boost or cut the output of the midrange and tweeter. This lets you fine tune the exact amount of presence the midrange contributes, and exactly how much sparkle the tweeter adds to the high end, so you can personalize your LB12 loudspeakers to sound just the way you want them to.

Throughout the design, development, and manufacture of the Nostala LB12 we've gone out of the way to create an extremely high quality, authentic but upgraded and updated, interpretation of a classic vintage loudspeaker.

We're really impressed, and we're sure you will be too...

Happy listening!
The Emotiva Team

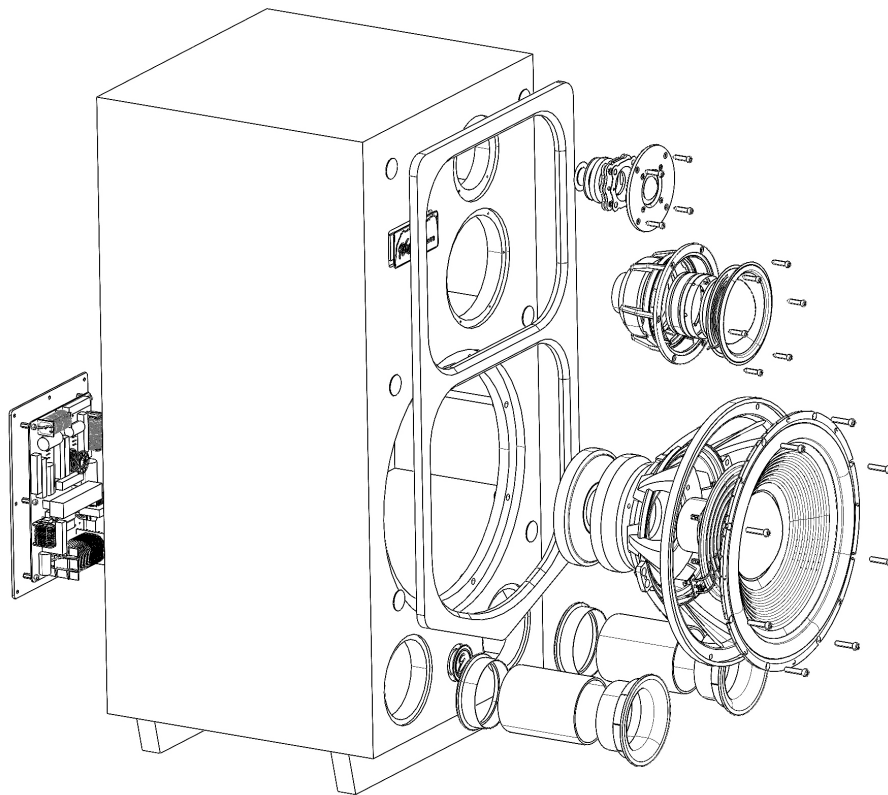
About This Manual

This manual will provide you with all the information you need to achieve great performance, accurate sound, and many years of reliable service from your new Emotiva Nostala LB12 loudspeakers.

We suggest that you read through the entire manual; we kept things as short and direct as possible. Even if you're an expert user, you will probably find some interesting information and useful suggestions.

If you're really in a hurry to get started, please read the Setup section (on page 13); you may then read the remainder of the manual at your leisure.

You may wish to record serial numbers or other purchase information on the Notes page at the back of this manual.



Features

First and foremost, as with all Emotiva loudspeakers, the Nostala LB12 was designed to deliver superb sound quality for any audiophile stereo or home theater sound system. But, in addition to that, we set out from the start to deliver a meticulous reimagining of a really great *vintage* loudspeaker. In furtherance of this lofty goal we included things like genuine furniture grade walnut veneer on the cabinet, and switches that allow you to independently adjust the response of the midrange and tweeter to fit your personal preference. We also carefully chose drivers that deliver modern performance, but also a subtle sonic signature reminiscent of some of the truly great vintage loudspeakers we still love to listen to.

The following are a few of the feature highlights of the Emotiva Nostala LB12:

- **28 mm (one inch) silk soft dome high-frequency transducer** - with a neodymium magnet assembly, aluminum wire voice coil, and copper shorting ring - delivers low distortion, and a smooth high frequency response, both on and off axis.
- **5-1/4" HyperDome™ midrange transducer** - a fabric dome transducer, with a rubber surround, a neodymium magnet structure, a 75 mm aluminum voice coil, and a very low resonant frequency - delivers exceptionally smooth detailed midrange over the critical voice range, with very low coloration, and integrates perfectly with the other drivers.
- **12" paper cone low frequency driver** - with a rubber surround, a 50 mm 4-layer voice coil, and a massive stacked magnet structure, delivers clean smooth low bass response.
- **Midrange and tweeter level switches** - enable you to precisely adjust the amount of presence the midrange contributes, and the amount of sparkle from the tweeter, so you can fine tune your loudspeakers to sound just the way you want them to.
- **Heavily braced, acoustically inert, HDF cabinet** - eliminates unwanted vibrations that might otherwise color the sound.
- **Double flared heavy-duty tuned ports** - optimize bass response and damping while preventing unwanted port noise.
- **Hand applied furniture grade walnut veneer** - on all surfaces, including the front and rear panels, ensures that your Nostala LB12 looks as good as it sounds.
- **Two removable grills** - The LB12 ships with two removable grills, one beige and one neutral grey, to ensure a perfect match with your decor.
- **Use them with or without the removable grilles** - the fully finished front panel on the LB12, with its elegant metal Nostala badge and Emotiva logo, looks great with the grill off.
- **Bi-amp terminals** - The LB12 has bi-amp terminals that enable you to access the woofer and midrange/tweeter sections of the speaker separately for bi-amping or bi-wiring.
- **Vintage speaker aesthetic** - We've gone out of the way to ensure that the LB12 delivers the performance you would expect from a modern loudspeaker design, while still delivering a look, feel, and sonic signature, of a classic vintage loudspeaker.
- **Full Ten Year warranty** - ensures that you'll be able to enjoy your speakers for years to come.

You can find more information about the Emotiva Nostala LB12 speakers at: www.emotiva.com



Unpacking

Your Emotiva Nostala loudspeakers were carefully packed and should reach you in perfect condition. If you notice any shipping damage or other issues when you unpack them, please contact Emotiva immediately.

Gently remove your loudspeakers from the packing cartons and remove all wrappings and shipping material. Avoid pressing directly on the front of the drivers or dropping any bits of packing material into the port openings.

Be sure to locate all extra parts, such as the grills, which may be stored in spaces in the packing material.

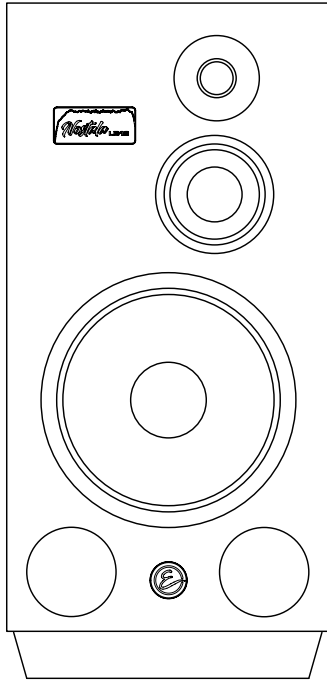
It is important to save the box and all packing materials in case your speakers ever need to be moved or shipped back to the factory for service.

Please keep your sales receipt in a safe place. It is the easiest way to verify your purchase date for warranty purposes, and may also be required if you ever have to file an insurance claim.

We truly value customer feedback and would like to hear from you.

Emotiva[®] Nostala[™] LB12

Specifications



The Emotiva Nostala LB12 is a three way, floor standing loudspeaker, featuring a silk soft dome tweeter, our HyperDome™ midrange, and a heavy duty paper cone woofer.

The Nostala LB12 is a modern interpretation of a classic three-way ported loudspeaker, which combines a vintage design aesthetic with modern materials, engineering, and components. The result is a speaker that offers the best of both worlds.

Driver Complement

High frequency driver: 28 mm (one inch) silk soft dome tweeter, with a neodymium magnet assembly, a machined aluminum face plate, and an aluminum wire voice coil with a copper shorting ring.

Midrange driver: 5-1/4" HyperDome™ soft fabric midrange transducer, with a rubber surround, a neodymium magnet structure, and a 75 mm aluminum voice coil with a copper shorting ring.

Low frequency driver: 12" paper cone woofer, with a die-cast frame, dual 140 mm magnets, an NBR surround, and a 4-layer 50 mm voice coil with an aluminum shorting ring.

Cabinet tuning: Dual flared front ports.

Crossovers: 200 Hz and 2 kHz; 12 dB / octave.

Controls: 2 switches; fine midrange and tweeter level adjustment.

Electrical Specifications

Efficiency: 91 dB (2.83V/1m).

Power handling: 150W continuous / 350W peak.

Nominal impedance: 8 ohms.

Frequency response: 40 Hz - 32 kHz (+/- 3 dB).

Dual speaker terminals for bi-amping or bi-wiring.

Mechanical

Finish: Genuine walnut wood veneer (on all surfaces).

Badges: Machined solid metal Nostala and Emotiva logo badges.

Dimensions (without feet): 30" h x 15-1/2" w x 14-1/2" d.

(add about 2-1/2" for permanently attached feet)

(add 1/2" for grill - if used)

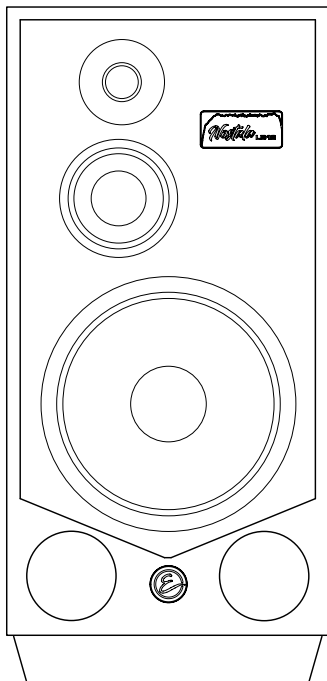
Weight: 71 pounds (each).

Mounting: Permanently attached wooden feet.

Grilles: Fabric over MDF; attached via strong magnets.

(TWO grilles included - biege and neutral grey fabric)

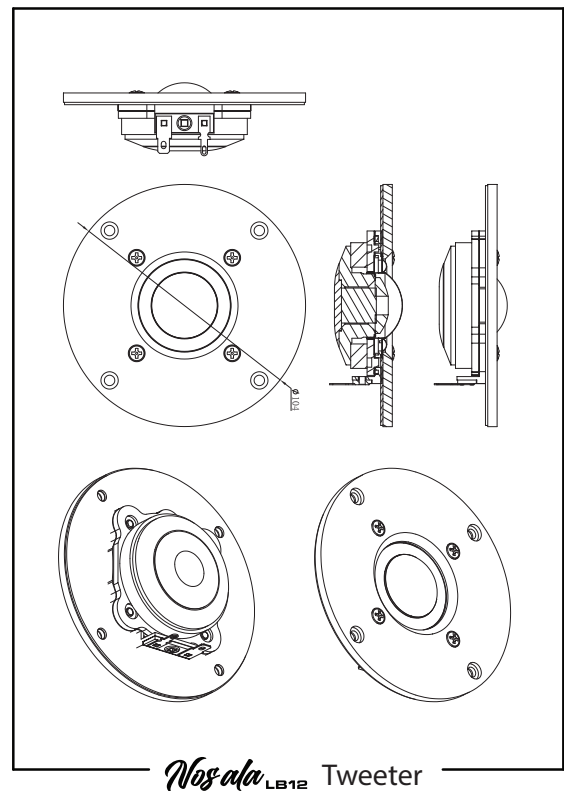
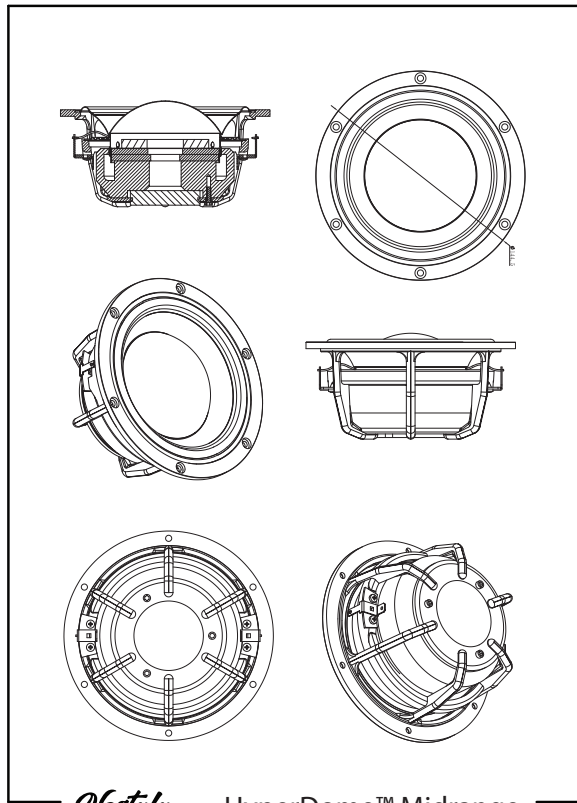
(fully finished front looks great without a grill)



Design Highlights

We're so proud of the work we've put into our new Nostala LB12 loudspeakers, and of how great they sound, that we're including a brief glimpse into some of the technical details that go into the design and realization of a truly great loudspeaker.

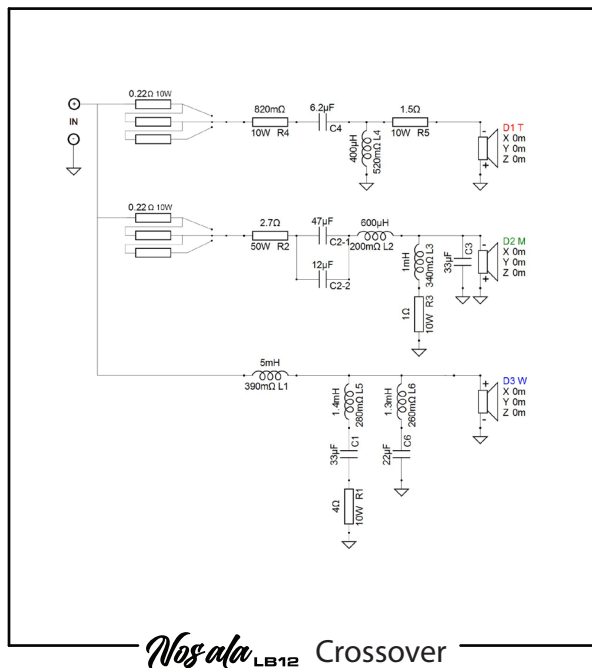
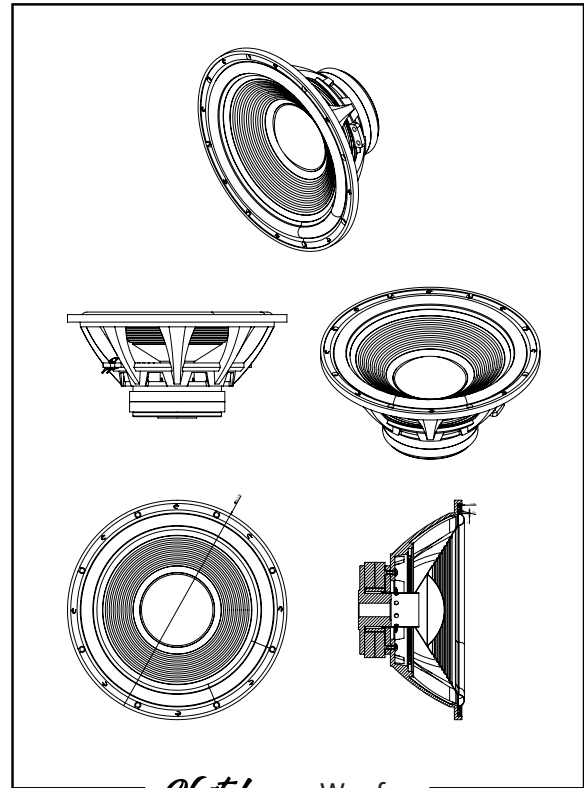
We started with a modern reimagining of the classic 1" soft dome tweeter, which combines a classic silk fabric dome with a modern neodymium magnet structure, and a machined face plate and internal components, for a smooth yet extended high frequency response.



We added our 5-1/4" HyperDome™ midrange, which features a large cloth dome, a modern neodymium magnet structure, and a huge 75 mm aluminum voice coil, for incredibly smooth uncolored midrange, especially in the critical voice frequencies.

Emotiva[®] Nostala[™] LB12

For truly impressive low frequency performance we chose a heavy duty 12" paper cone woofer, with a 50 mm dual layer voice coil, and dual 140 mm ferrite magnets, that delivers both deep powerful low bass extension and exceptionally clean upper bass and mid-bass response.



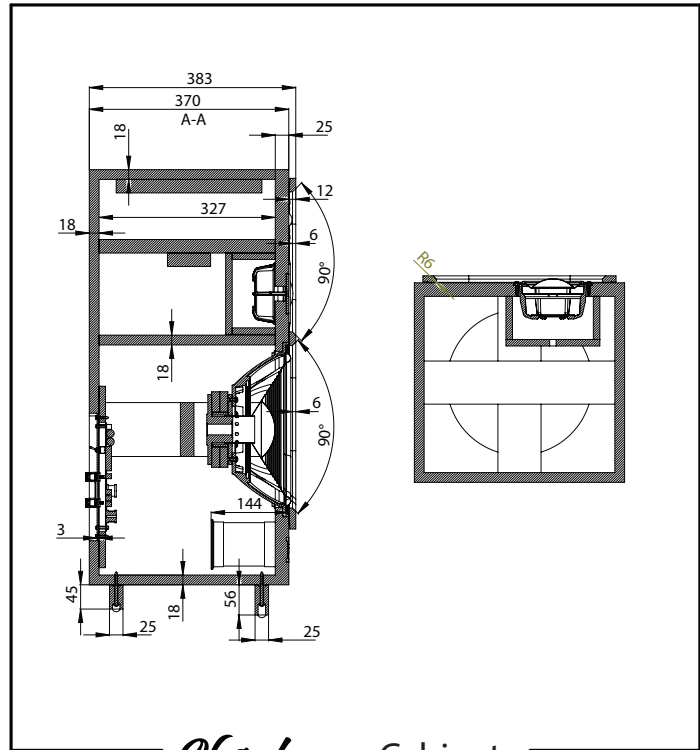
And, to make sure that all of those drivers work perfectly together, we included a precision engineered crossover network made from audiophile quality components and manufactured to our exacting standards.

We also included a pair of rear-panel toggle switches; one subtly raises or lowers the amount of presence the midrange contributes; the other enables you to add or remove a tiny bit of sparkle from the response of the tweeter. These switches allow you to precisely fine tune the sonic signature of the LB12 to perfectly match your personal preference and the acoustics of your listening room.

Emotiva® Nostala™ LB12

The final critical component in any loudspeaker is the cabinet. For the LB12 we designed a heavy, critically braced, acoustically inert, HDF cabinet that is rock solid and contributes no unwanted vibrations or cabinet resonances. And, to ensure that the LB12 looks as good as it sounds, and will continue to do so for years to come, we covered the cabinet in genuine furniture grade walnut veneer on all sides.

The front of the cabinet proudly displays all-metal badges showing the Nostala insignia and our Emotiva logo. And, if you prefer a more subdued appearance, we've included not one but two grills in both beige and neutral grey, which attach firmly and precisely via powerful concealed magnets.

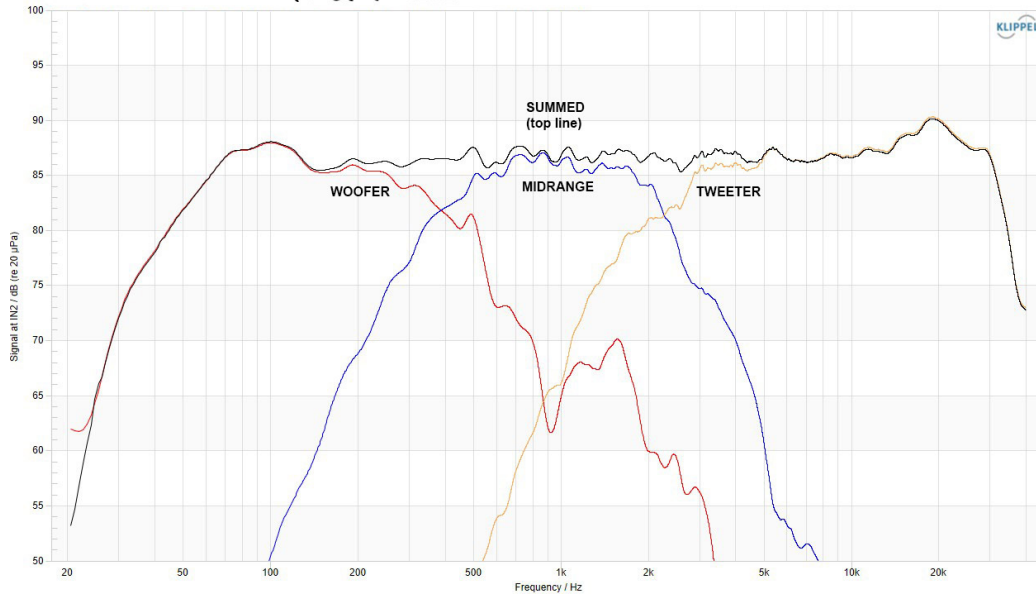


Nostala LB12 Cabinet

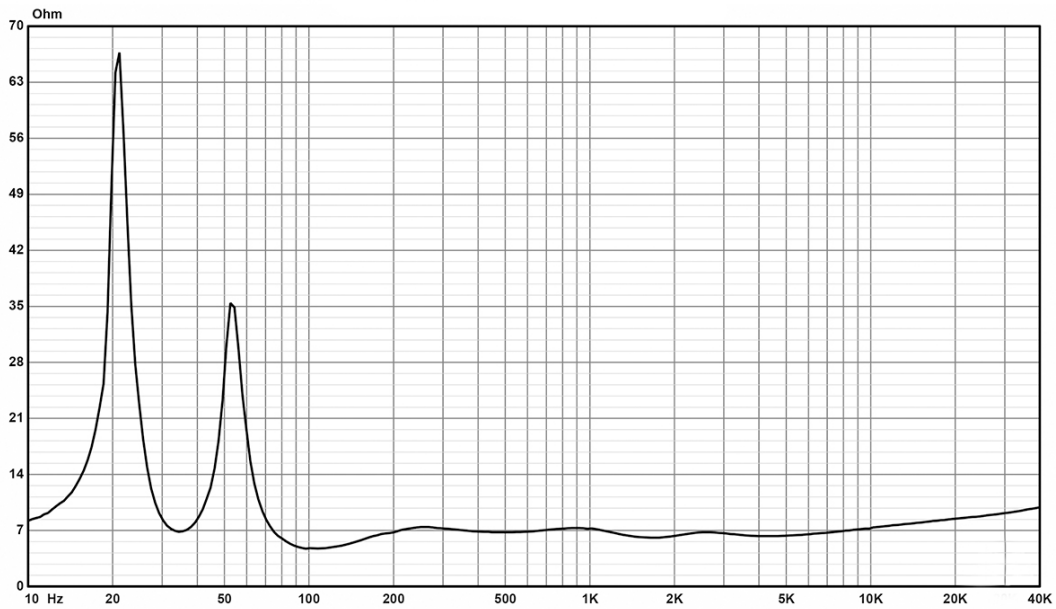
Emotiva® Nostala™ LB12

And, as they say, the results speak for themselves. The Nostala LB12 is a truly great loudspeaker, combining the characteristics of a high performance modern speaker, with just a touch of the vintage sonic signature that we love so much.

Nostala LB12 On-Axis Frequency Response



Nostala LB12 Impedance (electrical)



Setup

To get the most from your Emotiva Nostala LB12 loudspeakers, we urge you to read the entire manual, especially the next section entitled Speaker Placement. If you just can't wait to hear how great your speakers sound, this section will cover the basics you need to get started.

- Your LB12 loudspeakers are quite heavy and include integral wooden stands which are designed to hold the speaker at a slight backwards angle that is perfect for normal seated listening when they are placed directly on a bare or carpeted floor.
- Speakers usually sound their best when located at least a foot or two away from rear and side walls and toed in to face slightly towards the central listening position. However, since this will vary depending on the acoustics of your room, we recommend experimenting to find the optimum distance and toe-in angle for your particular listening room and setup.
- The LB12 is shipped in mirror-image pairs. Placing them with the midrange and tweeter on both speakers toward the center will usually deliver a more pinpoint and intimate soundstage, while placing them with the midrange and tweeter toward the outside will often produce a wider sound stage. Which you choose will depend on how you position your speakers, the acoustics of your listening room, and your personal preference.
- Your LB12 loudspeakers have two switches on the rear panel that allow you to adjust the levels of the Midrange and Tweeter to suit your listening preferences and compensate for room acoustics. You will normally achieve the flattest frequency response when both of these switches are set in their center Flat position. While these switches are intended to allow you to tune the way your Nostala speakers sound to suit your personal preferences, we do recommend that you set the switches on both speakers in a pair the same way.
- Your LB12 loudspeakers are fully finished on all sides and look great without their grills. However, we've also included two grills for you to choose from, in your choice of beige or neutral grey fabric, which attach securely using powerful hidden magnets. While the LB12 is designed to be used with or without the grills attached, the grills WILL have a subtle effect on how they sound, so we recommend deciding whether you plan to use the grills BEFORE otherwise fine tuning the way they sound in your room.
- Your LB12 loudspeakers have dual binding posts for amplifier connections and can be bi-wired or bi-amped if you choose. If you do NOT bi-wire or bi-amp your Nostala speakers, then the bi-amp jumpers should remain in place, and you can connect your amplifier to either the upper or lower pair of binding posts. If you choose to bi-wire or bi-amp your LB12 loudspeakers then you must be sure to remove the bi-amp jumpers on your speakers before connecting your amplifiers. **FAILURE TO DO SO MAY RESULT IN DAMAGE TO YOUR AMPLIFIERS.**
- Your LB12 loudspeakers are nominally rated at 8 Ohms and will work well with any modern solid state amplifier, receiver, or AVR, including all of our Emotiva models. If you have a tube amplifier that offers multiple speaker output connections they should be connected to the 8 Ohm speaker tap.
- Find some music you really like to listen to and Enjoy!

While you're enjoying your Emotiva Nostala LB12 speakers, it would be a great time to read the rest of the manual to learn more about them.

Speaker Placement

Speaker placement is often a compromise between optimum performance, personal preference, and site requirements. The optimum location for stereo speakers will depend on the speakers and the acoustics of your listening room. The important thing to remember is that each room is different, and so these recommendations should be considered guidelines rather than rules; you should always position your speakers where they sound the best to you, in your room, with your other equipment.

Your Emotiva Nostala LB12 loudspeakers are intended to stand directly on the floor using their permanently attached stands. The stands, which are designed to hold the speakers at a slight backwards angle, have small nylon buttons on the bottom to protect wooden floors and prevent the speakers from moving. If you wish to use different stands, the pre-attached stands can be removed by removing several screws, and doing so will not void your warranty. If you do choose to use additional stands, or higher stands, be sure that they are both stable and rated to hold the weight of the LB12 (a little over 70 pounds each).

All of the following guidelines are just suggestions. There are many things that affect how a speaker sounds in a particular room so you should always experiment to choose the best possible options for your particular room and system.

Guidelines for stereo speaker placement:

- For good imaging, always try to place speaker pairs in symmetrical locations (equidistant from side and back walls).
- Facing the speakers directly forward will tend to produce a wide sound stage; adding toe-in (so that the speakers directly face the listening position) will make the sound stage more focused.
- The Nostala LB12 is provided in mirror pairs. Placing them with the midranges and tweeters toward the center will produce a narrower and more intimate sound stage; placing them with the midranges and tweeters toward the outside will provide a wider and more spacious sound stage.
- Moving the speakers further apart will make the sound stage wider, but may cause a gap in the center of the sound stage.
- Placing the speakers at least a few feet from front and side walls will usually improve imaging and smooth frequency response.
- Placing speakers close to room corners will usually boost bass, but often at the cost of making the bass more boomy and less smooth.
- If possible, try to make the room acoustically symmetrical from side to side; doing so will usually significantly improve imaging. (If you have something reflective, like a large window, on one side, have a large picture or bare wall on the other. If you have a large absorptive couch on one side wall, balance it with a tapestry on the opposite wall.)
- If possible, stereo speakers should be placed symmetrically, and the listening position located equidistant from both speakers.
- While the LB12 is designed to be used with or without the included grills, the grills will have a subtle effect on how they sound, so you should decide whether you plan to use them mostly with the grills on or off before fine tuning their position and switch settings.

Care and Maintenance

Periodic Maintenance

Your Nostala LB12 loudspeakers require no periodic maintenance or calibration.

Caring for and Cleaning the Cabinet

The cabinets of the Emotiva Nostala LB12 loudspeakers are covered in genuine walnut wood veneer. This veneer is already finished and requires no additional treatment or maintenance. Please treat your Nostala LB12 loudspeakers as you would other fine furniture.

- **You MAY apply a high-quality furniture wax or similar surface treatment to them.**
- **DO NOT apply any sort of varnish, urethane, plastic, or other permanent sealant type finish to the veneer on your LB12 loudspeakers.**
- **The genuine walnut veneer on your LB12 loudspeakers already has a sealed finish. Therefore you should NOT apply any sort of penetrating oil to them that is intended specifically for unsealed wood finishes (like linseed oil).**
- **DO NOT spray water directly onto the finish and DO NOT use any abrasive or solvent type cleaners on your LB12 loudspeakers.**
- **You MAY clean the finish with a SLIGHTLY DAMP rag if absolutely necessary.**
- **AVOID placing anything wet, or anything that may become wet due to condensation, or anything that may drip liquids, onto the speaker.**
- **AVOID placing cups or other containers with hot liquids like tea or coffee onto the speaker.**

Caring for and Cleaning the Speaker Drivers

- **DO NOT use any sort of liquid or wet cloth on any of the speaker drivers.**
- **DO NOT use a vacuum cleaner to clean the tweeter or midrange drivers. The woofer cone MAY be cleaned CAREFULLY with a very soft brush or micro-fiber cloth.**
- **Avoid touching the tweeter and midrange domes with your fingers. If necessary the tweeter and midrange MAY be cleaned VERY GENTLY with a VERY SOFT brush or micro-fiber cloth.**

Cleaning the Grill Cloths

- **If necessary, the grill cloth may be carefully vacuumed to remove dust or hair.**
- **Animal hair may be removed by using a “tape” type lint remover, sticky roller, or soft brush. Avoid using brushes with stiff bristles that may pull or damage the grill cloth.**



Emotiva Audio Corporation Ten-Year Limited Warranty

What does this warranty cover?

Emotiva Audio Corporation (Emotiva) warrants the Emotiva Nostala LB12 loudspeaker against defects in materials and workmanship for a full ten years. This warranty, and all rights provided hereunder, is granted to the original owner, and may NOT be transferred if the unit is gifted or sold.

This Warranty only applies to Products purchased directly from Emotiva or any of its Authorized Dealers or International Distributors.

Emotiva warrants any replacement product or part furnished hereunder against defects in materials and workmanship for the longer of the following: (i) the amount of time remaining under the original warranty, or (ii) 120 days from your receipt of the repaired or replaced product. The duration described in this paragraph is hereinafter referred to as the "Term".

TO THE FULLEST EXTENT PERMITTED BY LAW, ALL IMPLIED WARRANTIES RELATED TO THE ORIGINAL PRODUCT AND ANY REPLACEMENT PRODUCT OR PARTS (INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE) ARE EXPRESSLY LIMITED TO THE TERM OF THIS LIMITED WARRANTY. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

The original owner must make a claim within the Term of the Warranty. A claim shall not be valid (and Emotiva has no obligation related to the claim) if it is not made within the Term and if it is not made in strict compliance with the requirements of the "How do you get service?" section.

How long does this coverage last?

The warranty on the Emotiva Nostala LB12 commences on the date of retail purchase by the original retail purchaser and runs for a period of ten years thereafter. Emotiva warrants any replacement product or part furnished hereunder against defects in materials and workmanship for the longer of the following: (i) the amount of time remaining under the original warranty, or (ii) 120 days from your receipt of the repaired or replaced product. The duration described in this paragraph is hereinafter referred to as the "Term".

What will Emotiva do?

Emotiva will, at its option, either: (i) repair the product, or (ii) replace the product with a new consumer product which is identical or reasonably equivalent (in Warrantor's sole discretion) to the product. In the event Warrantor, in its sole discretion, is unable to replace or repair the Product or it is not commercially practicable to do so, then: (i) if the claim was submitted during the first 365 days of the Term, Warrantor shall refund to you the purchase price that you paid for the Product; and (ii) if the claim was submitted after the first 365 days of the Term, Emotiva shall issue you a credit equal to the purchase price that you paid for the product. The credit may only be used for the purchase of merchandise from Emotiva, and cannot be used for freight charges.

When a Product or part is repaired or replaced, any replacement item becomes your property and the replaced item becomes Emotiva's property. When a refund or credit is given, the Product for which the refund or credit is provided must be returned to Emotiva and becomes Emotiva's property.



What is not covered by this warranty?

This warranty does not apply: (i) to damage caused by use with products not manufactured by Emotiva, where the non-Emotiva product is the cause of the damage; (ii) to damage caused by service or maintenance performed by anyone who is not a representative of Emotiva; (iii) to damage caused by accident, abuse, misuse, flood, fire, earthquake or other external causes such as electrical surges caused by lightning or unstable line voltage; (iv) to a product or part that has been modified after its retail purchase, where the modification caused or contributed to the damage; (v) to consumable parts, such as batteries or failure of or damage to the Product caused by batteries; (vi) if any Emotiva serial number has been removed or defaced on the product; (vii) to glass or plastic panels, cabinetry, veneer, trim, grill cloths, or other appearance items; (viii) to cosmetic wear or damage to remote controls by user.

EMOTIVA SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING FROM OR RELATED TO ANY DEFECTS IN OR DAMAGES TO ITS PRODUCTS. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

How do you get service?

In order to make a claim under the Warranty, you must:

1. Call or e-mail a customer service representative at 1-615-790-6754 or support@emotiva.com . You must provide a description of your problem, the serial number of the Product for which the warranty claim is being made, and the original purchase date.
2. Then, you will be provided with a warranty service authorization number (“WS”).
3. Next, you must ship the Product to the following address, with the WS written in large, bold numbers on the outside of the box, and with the letters “WS” written before the number, for example: WS1234. Parcels arriving without a WS number on the outside of the box will be refused. The customer pays for the shipping to Warrantor. Warrantor pays for the shipping back to the customer within the continental United States only. Customer is responsible for shipping charges on all other warranty claims.

**Emotiva Audio Corporation
Attn: Repair Department
139 Southeast Parkway Court
Franklin, TN 37064**

Units will be refused by Emotiva for the following:

- Product was sent without the WS#
- Product was sent with inadequate packaging.
- Product was damaged in transit.
- Product was shipped collect for shipping charges.



How does state law apply?

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

What if my product is damaged on the way to you?

Emotiva is not liable for damages that may incur while an item is in transport to us. Please purchase insurance when you ship your item. If your Product was not adequately packaged, we will refuse receipt and the damaged package will be returned to you at your cost. If you do not have the original Emotiva Audio packaging, please check with our sales department to purchase replacement-shipping cartons.

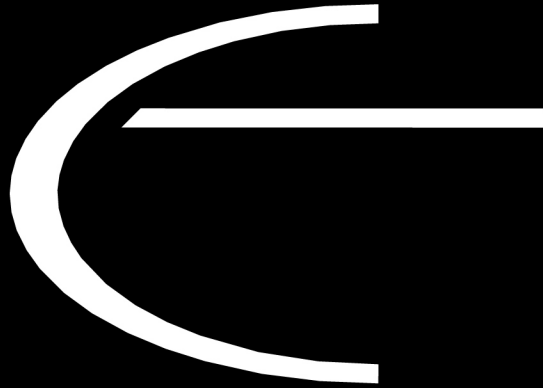
How does the Warranty and service apply to international orders?

The Product Warranty is only valid in the country where the Emotiva product was originally shipped via an authorized dealer, distributor, or direct from the Emotiva factory. The Warranty is subject to change at any time depending on the laws and regulations within your specific country. Please check with your distributor for a complete understanding of the warranty in your county.

If you purchased your Emotiva Product outside of the USA and wish to have it serviced at the factory, all freight charges are your responsibility. If you do not have an authorized distributor or repair center in your country, your Product must come back to the Emotiva USA factory for warranty service.

Notes

All information contained in this manual is accurate to the best of our knowledge at the time of publication. In keeping with our policy of ongoing product improvement, we reserve the right to make changes to the design and features of our products without prior notice.



Emotiva Audio Corporation
135 Southeast Parkway Court
Franklin, TN 37064

www.emotiva.com