

# EMOTIVA®



*airmotiv* **XS**

XS Subwoofer User Manual



## Important Safety Precautions and Explanation of Symbols



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important installation, operation, and service instructions in this manual.



The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated dangerous voltages within the enclosure that may be of sufficient magnitude to constitute a risk of electrical shock to the user.

Please read this manual thoroughly before attempting to install, configure, or operate your Emotiva Airmotiv XS Subwoofer. After successful installation and configuration of the XS Subwoofer, be sure to retain this manual in a safe place for future reference.

Safety is a key component to a long lasting and trouble free installation. Please read and follow all instructions and heed all warnings on the Airmotiv Subwoofer and in this manual. The vast majority of the subsequent safety precautions are common sense. If you are not comfortable with the installation of audio/video entertainment equipment, you should seek the services of a qualified installation professional or call us for help.



**WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT USE THE AIRMOTIV XS SUBWOOFER NEAR WATER OR IN WET LOCATIONS, DO NOT EXPOSE IT TO RAIN OR MOISTURE, DO NOT EXPOSE IT TO DRIPPING OR SPLASHING FROM OTHER SOURCES, AND ENSURE THAT NO OBJECTS FILLED WITH LIQUIDS (SUCH AS VASES) ARE PLACED ON IT. DOING SO MAY RESULT IN DAMAGE TO THE UNIT AND THE RISK OF ELECTRIC SHOCK, WHICH MAY RESULT IN BODILY INJURY OR DEATH.**



**WARNING: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE THE AMPLIFIER PLATE OR DRIVERS FROM THE AIRMOTIV SUBWOOFER. THERE ARE NO USER-SERVICEABLE PARTS INSIDE THE UNIT. REFER ALL SERVICE TO QUALIFIED SERVICE PERSONNEL.**

Do not install the Airmotiv XS Subwoofer near or above any heat sources such as radiators, heating vents, or other apparatus that produce heat. Leave plenty of clearance behind the subwoofer to allow air-flow through the heat sinks and over the amplifier plate located in the rear panel of the subwoofer. Avoid installing the unit directly above other heat-producing equipment unless sufficient ventilation or forced-air cooling is provided.

Do not install the Airmotiv XS Subwoofer in locations without proper ventilation. The XS Subwoofer should not be operated on a bed, sofa, rug, or similar surface that may block vents. The unit should not be installed in an enclosed location such as a bookcase, cabinet, or closed equipment rack unless sufficient forced-air ventilation is provided, and clearance should be maintained between the rear-mounted heat sinks and objects like drapes that may reduce ventilation.

Always install your Airmotiv XS Subwoofer according to the manufacturer's instructions and only use attachments or accessories specified by the manufacturer.

Do not install the XS Subwoofer on any stand, shelf, or other piece of furniture that is unable to support its weight. If a cart is used to move the unit, use caution to avoid injury from tip-over.

Connect the XS Subwoofer only to power sources of the correct voltage (as shown in this manual and on the XS Subwoofer unit). Be sure to set the Line Voltage switch to the correct voltage for your area.

Protect power supply cables from being pinched, walked on, or otherwise damaged. Be especially careful where the power cable enters the power outlet and the unit.

Only connect the Airmotiv XS Subwoofer to an electrical outlet or extension cord of appropriate type and rating.

DO NOT defeat the safety purpose of a grounding or polarized plug by removing ground pins or using unsafe adapters. A polarized plug has two blades - one wider than the other. A grounding plug has a third ground prong in addition to the two main conductors. The wide blade or third grounding prong is provided for your safety. If the provided plug does not fit your outlet, consult an electrician to replace your obsolete outlet. If you replace the power cord, only use one of similar type and equal or greater current rating.

The power cable for the Airmotiv XS Subwoofer should be unplugged from the outlet during severe electrical storms, or when unused for a long period of time.

Only replace the fuse(s) in the Airmotiv Subwoofer with fuse(s) of proper value and voltage rating.

If you change the Line Voltage Selector switch setting be sure to replace the fuse with a new fuse of the proper current value to go with your new voltage setting.

The Airmotiv XS Subwoofer should only be cleaned as directed in the manual. Avoid spraying liquids directly onto the unit or drivers.

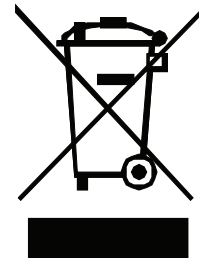


You should seek service for your Airmotiv XS Subwoofer by qualified service personnel if any of the following occur:

1. The power-supply cord or the plug has been damaged.
2. Objects or liquid have fallen or spilled into the vents.
3. The unit has been exposed to rain.
4. The unit exhibits a marked change in performance.
5. The unit has been dropped, or its enclosure or chassis is damaged.

**NOTE: TO COMPLETELY DISCONNECT THE AIRMOTIV XS SUBWOOFER FROM THE AC POWER MAINS, DISCONNECT THE AC POWER CORD FROM THE AC RECEPTACLE.**

**NOTE: THE POWER CORD ON THE AIRMOTIV XS SUBWOOFER MUST REMAIN READILY ACCESSIBLE AT ALL TIMES.**



# FCC Statement

1. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) This device must accept any interference received, including interference that may cause undesired operation.

2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

***NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.***

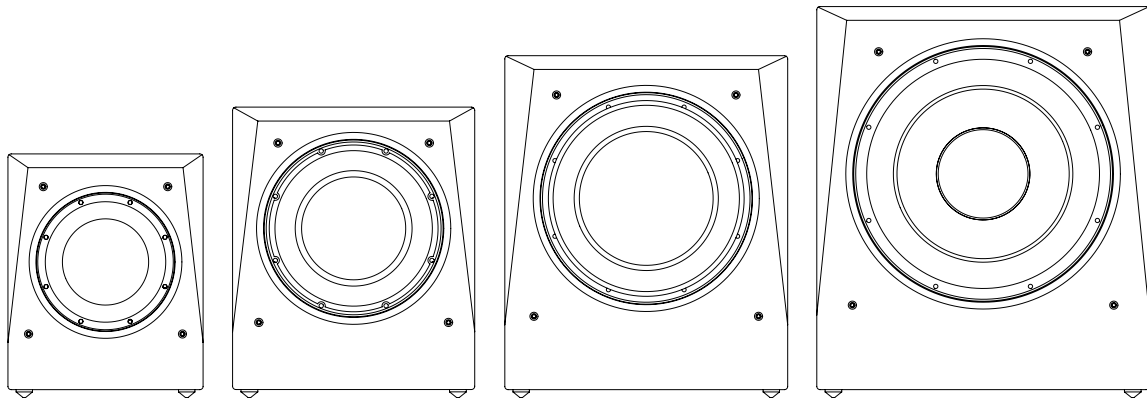
This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

## Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator & your body.





## Airmotiv XS Subwoofers

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## Introduction

Thank you for purchasing one of our new Emotiva Airmotiv™ XS Subwoofers.

Emotiva Airmotiv™ XS Subwoofers were designed to reproduce the lowest frequencies in the audio spectrum accurately and with exceptionally low distortion - even at high listening levels. This means that our XS Subwoofers can deliver all of the dynamics and raw power you need to make a modern movie sound track rattle the walls, but still offer the precision and superb musicality you need to get the most from well recorded music. With our XS Subwoofers, you don't have to compromise; you really can have it all.

Our XS Subwoofers come in four models: the XS8, XS10, XS12, and XS15. Each model includes a heavy duty cast frame low frequency driver, and each model is powered by a powerful audiophile quality Class A/B amplifier. The various models offer identical controls and features with the main difference being that the larger models have more power, can produce higher output levels, and their frequency response extends lower.

The cabinets, which are quite compact for the performance they deliver, combine massive, heavily braced construction, and an attractive design aesthetic that blends well with most decor. The attractive faceted front panels feature an elegant black lacquer finish, and the sides and rear panels are covered in attractive yet practical textured vinyl. Sculpted cloth grills perfectly match the outline of the cabinet bevels, and heavy duty integral feet provide support and minimize vibration. All controls and connections are conveniently located on the rear panel, which also includes the high-efficiency heat sinks that provide cooling for the internal amplifiers.

We're very proud of our new Airmotiv XS Subwoofers, and we hope you'll enjoy listening to them as much as we enjoyed designing and producing them for you.

Happy listening!

The Emotiva Team

## Features

Our Emotiva Airmotiv™ XS Subwoofers were designed to offer truly exceptional performance and superb sound quality - with both music and movies. Their design and performance features were carefully chosen to appeal to both home theater buffs and audiophiles, with a choice of input options and operating modes well suited to a wide variety of applications, and the controls needed to perfectly match them to any system or room.

The following are a few of the feature highlights of our Airmotiv XS Subwoofers:

- **High performance, compact size, and great sound** - All of our Airmotiv XS subwoofers offer superb sound quality, low distortion, and high output - in a relatively compact form factor. They're also available in four different models - 8", 10", 12", and 15" - so you can choose the perfect combination of maximum output, low frequency extension, and cabinet size.
- **Powerful audiophile quality Class A/B amplifiers** - powered by oversized toroidal power transformers, provide our XS subwoofers with plenty of power to fully energize your room with clean low distortion bass.
- **Flexible input and control options** - including both balanced and unbalanced inputs, a phase control, and a LF Boost control, which allows you to customize bass response in the lowest octave.
- **Advanced multi-stage limiter** - protects our XS subwoofers from being overdriven, and keeps distortion from intruding on your listening experience.
- **Non-pressed treated paper cones** - reinforced with aramid fibers for excellent rigidity and optimal internal acoustic damping.
- **Rugged construction** - Cast aluminum baskets, tough SBR rubber surrounds, and large internal clearances on both drivers ensure years of trouble free service.
- **Powerful heavy duty motor assembly** - includes a large diameter double stacked ferrite magnet, and a large diameter heavy duty solid copper voice coil on an aluminum former, for superior power handling and low distortion.
- **Plenty of cooling for long life** - Forced air cooling, a vented pole piece, and vents located under the spider, ensure that our drivers remain cool, even with extended use under demanding operating conditions.
- **Tough yet attractive exterior** - Several coats of satin-finish lacquer give the front panel of our Airmotiv subwoofers an elegant understated appearance, while a tough yet attractive vinyl covering protects the sides and rear from damage and fingerprints.
- **Removable sculpted fabric grilles** - protect the subwoofer and keep your technology under wraps, but can be easily removed for cleaning - or to show off your XS subwoofer to your audiophile friends.
- **Heavily braced acoustically inert HDF cabinet** - ensures that the only sound you'll hear from our Airmotiv XS subwoofers is pure clean bass, and integral non-slip rubber feet ensure that your XS subwoofer will stay exactly where you put it.
- **Full five year warranty** - ensures that you'll enjoy your Airmotiv XS subwoofers for years to come.

You can find more information about the Emotiva Airmotiv XS Subwoofers on our website at [www.emotiva.com](http://www.emotiva.com).

## Unpacking

Your Airmotiv XS subwoofer was carefully packed and should reach you in perfect condition. If you notice any shipping damage or other issues when you unpack it, please contact Emotiva immediately.

Gently remove your XS subwoofer from the packing carton and remove all wrappings and shipping material. Avoid pressing directly on the front of the driver.

It is important to save the box and all packing materials in case your XS subwoofer ever needs 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.

## Quick Start

To get the most from your Airmotiv XS subwoofer, we urge you to read the entire manual. If you just can't wait to hear how great your XS subwoofer sounds, this section will cover the basics you need to get started.

- Find a secure location for your Airmotiv XS subwoofer.
- ***Make sure your Airmotiv XS Subwoofer is set for the proper line voltage.***
- Insert the IEC power cable provided with your subwoofer into the receptacle on the rear panel and connect it to an appropriate AC outlet.
- Connect your XS subwoofer to the LFE or subwoofer output on your AVR or pre/pro.
- Configure your AVR or pre/pro to expect a subwoofer.
- Find some music you *really* like to listen to... with some *really* impressive bass.
- Enjoy!

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

## Setting The AC Line Voltage on Your Subwoofer

If you ordered your Airmotiv XS Subwoofer directly from Emotiva, it should already be set for the correct line voltage in your area. However, we always recommend confirming the correct setting before plugging in your XS subwoofer. If you move to a different country, or a different region, with a different line voltage, you **MUST** change the Line Voltage Selector setting on your Airmotiv XS subwoofer to the correct line voltage.

***Note: Attempting to operate your Airmotiv XS Subwoofer with the Line Voltage Selector Switch set to the wrong voltage for your area may result in damage to your XS subwoofer.***

In order to change the line voltage on your XS subwoofer, there are two changes which must be made.

- 1) Change the setting on the Line Voltage Selector Switch on the rear of the unit to the correct line voltage for your area.
- 2) Change the fuse to the appropriate value for your line voltage.

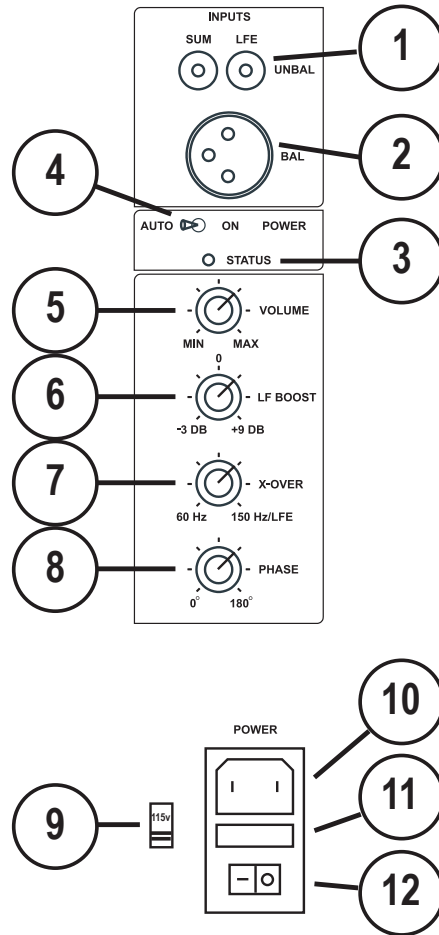
***Note:***

***See pages 7 through 9 for the location of the Line Voltage Selector Switch and Fuse Holder.***

***Note:***

***Refer to the markings on the rear panel of your unit for the correct fuse value for the model of Airmotiv XS subwoofer you have and your line voltage.***

**Airmotiv XS Subwoofer Controls & Connections**



All of the controls and input connections on the Airmotiv XS8, XS10, XS12, and XS15 are on the rear panel. All four models offer the same input and control options.

**1. RCA Inputs (unbalanced)**

The Airmotiv XS subwoofer has two unbalanced line level audio inputs, which are summed together internally. If your source component provides separate left and right subwoofer or full range outputs, they should be connected to the Sum and LFE RCA inputs. If your source provides a single unbalanced subwoofer output, it may be connected to either input.

**2. XLR Input (balanced)**

If your source component has a single balanced subwoofer or LFE output, then it should be connected to this input. (If your source component offers both balanced and unbalanced outputs, the balanced connection is preferred because it offers better resistance to line noise, especially if you are using a long interconnect cable, or if your interconnect runs through the wall or near a power cable.)

### 3. Status Indicator

The Status Indicator will be illuminated green when the Airmotiv XS subwoofer is On, and will be illuminated red when the subwoofer is in Standby Mode.

### 4. Power Mode Switch

**Note: Your Airmotiv XS subwoofer will only operate if the AC POWER Switch is turned ON. If the AC POWER Switch is OFF, your subwoofer will NOT operate.**

When the Power Mode Switch is set to On, the Airmotiv XS will remain On continuously.

When the Power Mode Switch is set to Auto, the subwoofer will turn On automatically when incoming audio is detected. Once the subwoofer is On, it will remain On for several minutes; if no audio is detected after several minutes, the subwoofer will return to Standby Mode.

### 5. Volume Control

This control sets the relative gain of your subwoofer. Use this control to set the overall amount of bass delivered by your subwoofer to be a good match for the output of your main speakers.

### 6. LF Boost Control

The LF Boost control is used to fine tune the response of the Airmotiv XS subwoofer at very low frequencies to your room and personal preference. The response of your subwoofer will be flattest with this control set to the vertical (0 dB) position; in the fully counterclockwise position (left), bass is reduced by approximately -3 dB at 30 Hz; in the fully clockwise position (right), bass is boosted approximately +9 dB at 30 Hz.

**Note: If your system has automatic room correction, you should set this control to its center (flat) position before running room correction. Then, after running room correction, use the control to add a little more or less low bass to suit your personal preference.**

### 7. Crossover Control

Airmotiv subwoofers include a built-in 12 dB/octave crossover (low pass filter). This control allows you to adjust the crossover frequency for the best match with your main speakers. If you're using your subwoofer with a home theater pre/pro or AVR that has its own bass management, you should set this control to its highest frequency setting (fully clockwise - 150 Hz). If not, then the proper setting will depend on your main speakers, but 80 Hz (about 10 o'clock) is a good starting point - and is often considered to be a standard setting for home theater equipment.

### 8. Phase Control

The phase control is used to adjust the phase on your subwoofer to match the phase of your main speakers. The best setting here will depend on your main speakers and where your subwoofer is located in relation to them. This control is usually set to the point where you hear the most bass in the range of frequencies where the subwoofer overlaps with your main speakers.

## 9. Line Voltage Selector

This switch is used to select the appropriate line voltage for your area.

**NOTE: BE SURE TO SET THIS SWITCH TO THE CORRECT LINE VOLTAGE FOR YOUR AREA. IF YOU FAIL TO DO SO DAMAGE TO YOUR AIRMOTIV XS SUBWOOFER MAY RESULT.**

**Note: If you change the Line Voltage setting, you should also change the FUSE in the subwoofer to the appropriate value (fuse values are shown on the rear panel near the fuse holder).**

**Note: To change the Line Voltage Selector setting reach through the slot on the clear cover with a small screwdriver or other pointed tool and slide the switch to the desired setting. The switch slider will show the value you have selected.**

## 10. IEC Power Cable Receptacle

The IEC Power Cable receptacle accepts any standard IEC power cable. A high quality commercial power cable is provided with your Airmotiv XS subwoofer.

## 11. Fuse Holder

To change the fuse in your Airmotiv XS Subwoofer, remove the power cable, then gently pry the fuse compartment open (the fuse holder opens like a drawer). Replace the fuse with one of the correct value, replace the fuse drawer, being sure to snap it firmly into place, and reinsert the power cable.

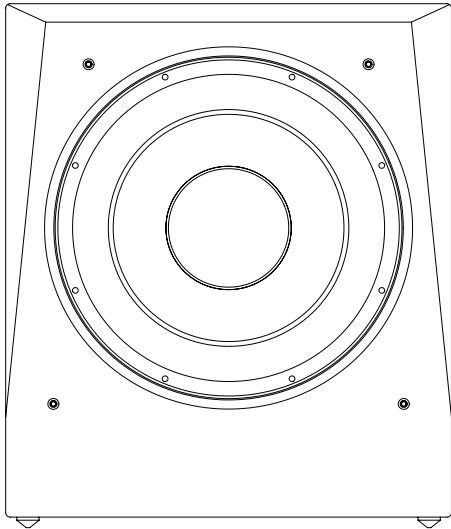
**Note: If the fuse in your subwoofer blows repeatedly without apparent reason, then you might have an electrical fault in your Airmotiv XS subwoofer, and you should call Emotiva Technical Support for assistance.**

## 12. AC Power Switch

Use this switch to turn the main AC Power to your Airmotiv XS subwoofer On and Off.

**Note: Your subwoofer will only operate if the AC POWER Switch is turned ON. If the AC POWER Switch is OFF, your subwoofer will NOT operate, and the Power Mode Switch will have no effect.**

## Airmotiv XS15

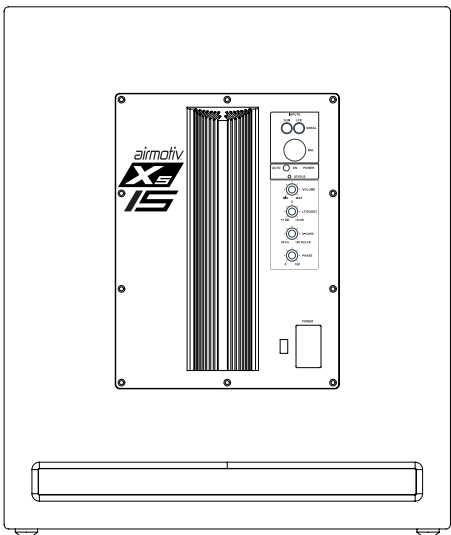


The Airmotiv XS15 is the ideal way to extend the bass response of your audio system to cover the last few critical octaves of bass with authority and finesse. The XS15 can deliver the raw power you need to add that final touch of realism to a movie, while still offering the low distortion and precise control you need for accurate, superb sounding music reproduction.

### Driver Complement

*Driver:* 15" heavy duty long throw subwoofer with cast aluminum frame, 3" copper voice coil, non-pressed paper cone reinforced with aramid fibers, tough SBR rubber surround, vented pole piece, and forced air cooling.

*Cabinet tuning:* Rear tuned slot port.



### Cabinet

Heavily braced acoustically inert HDF cabinet with removable sculpted fabric-covered grill. The front bezel is finished in several coats of satin finish black lacquer; the sides and rear are covered in tough attractive textured vinyl.

### Electronics

*Amplifier type:* Audiophile quality Class A/B amplifier.

*Amplifier power:* 600 Watts RMS.

*Protection:* Advanced multi-stage low-distortion limiter.

*Frequency response:* 20 Hz - 200 Hz (+/- 3 dB).

*Inputs:* Single XLR balanced input; summed left and right RCA unbalanced inputs.

*Controls:* Crossover, Phase, Volume, LF Boost.

*AC power:* 115 VAC/60 Hz or 230 VAC/50 Hz.

### Mechanical

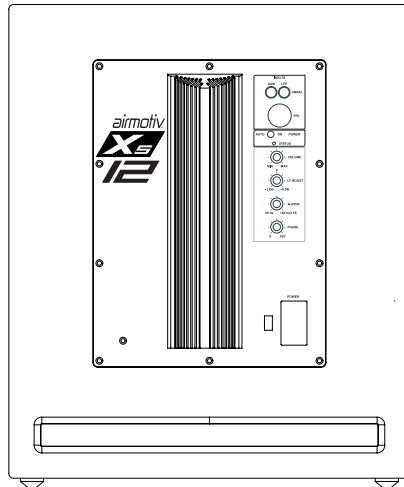
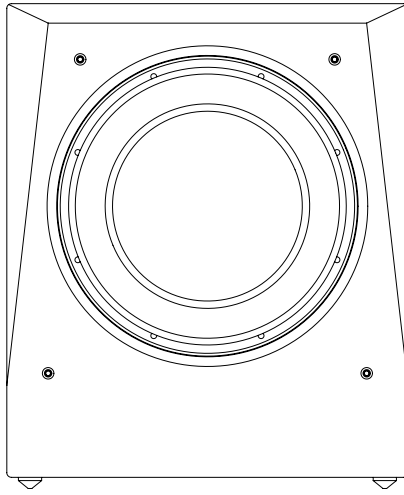
*Dimensions:* 23-5/8" high x 19-3/4" wide x 24-1/2" deep (feet included; leave extra room for heat sink and cables).

*Weight:* 136 pounds (boxed).

*Feet:* Permanently attached anti-slip rubber feet.



## Airmotiv XS12



The Airmotiv XS12 is the ideal way to extend the bass response of your audio system to cover the last few critical octaves of bass with authority and finesse. The XS12 can deliver the raw power you need to add that final touch of realism to a movie, while still offering the low distortion and precise control you need for accurate, superb sounding music reproduction. The XS12 delivers slightly less low bass extension than the XS15, but is slightly more compact, and is ideal for smaller rooms.

### Driver Complement

*Driver:* 12" heavy duty long throw subwoofer with cast aluminum frame, 2-1/2" copper voice coil, non-pressed paper cone reinforced with aramid fibers, tough SBR rubber surround, vented pole piece, and forced air cooling.  
*Cabinet tuning:* Rear tuned slot port.

### Cabinet

Heavily braced acoustically inert HDF cabinet with removable sculpted fabric-covered grill. The front bezel is finished in several coats of satin finish black lacquer; the sides and rear are covered in tough attractive textured vinyl.

### Electronics

*Amplifier type:* Audiophile quality Class A/B amplifier.

*Amplifier power:* 500 Watts RMS.

*Protection:* Advanced multi-stage low-distortion limiter.

*Frequency response:* 24 Hz - 200 Hz (+/- 3 dB).

*Inputs:* Single XLR balanced input; summed left and right RCA unbalanced inputs.

*Controls:* Crossover, Phase, Volume, LF Boost.

*AC power:* 115 VAC/60 Hz or 230 VAC/50 Hz.

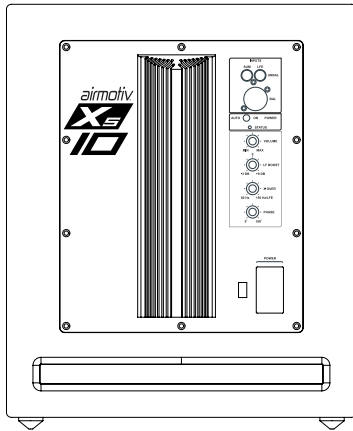
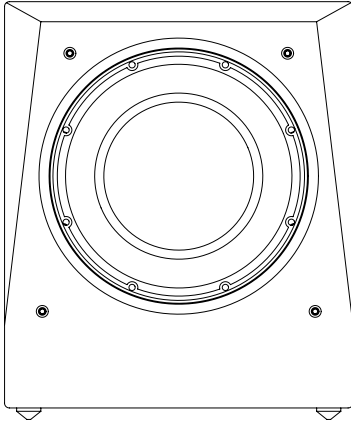
### Mechanical

*Dimensions:* 20-5/8" high x 17" wide x 19-1/2" deep (feet included; leave extra room for heat sink and cables).

*Weight:* 90 pounds (boxed).

*Feet:* Permanently attached anti-slip rubber feet.

## Airmotiv XS10



The Airmotiv XS10 is the ideal way to extend the bass response of your audio system to cover the last few critical octaves of bass with authority and finesse. The XS10 can deliver the raw power you need to add that final touch of realism to a movie, while still offering the low distortion and precise control you need for accurate, superb sounding music reproduction. The Airmotiv XS10 delivers slightly less low bass output than the XS12, but its smaller footprint makes it the ideal solution for installations where space is at a premium.

### Driver Complement

*Driver:* 10" heavy duty long throw subwoofer with cast aluminum frame, 2" copper voice coil, non-pressed paper cone reinforced with aramid fibers, tough SBR rubber surround, vented pole piece, and forced air cooling.

*Cabinet tuning:* Rear tuned slot port.

### Cabinet

Heavily braced acoustically inert HDF cabinet with removable sculpted fabric-covered grill. The front bezel is finished in several coats of satin finish black lacquer; the sides and rear are covered in tough attractive textured vinyl.

### Electronics

*Amplifier type:* Audiophile quality Class A/B amplifier.

*Amplifier power:* 350 Watts RMS.

*Protection:* Advanced multi-stage low-distortion limiter.

*Frequency response:* 26 Hz - 200 Hz (+/- 3 dB).

*Inputs:* Single XLR balanced input; summed left and right RCA unbalanced inputs.

*Controls:* Crossover, Phase, Volume, LF Boost.

*AC power:* 115 VAC/60 Hz or 230 VAC/50 Hz.

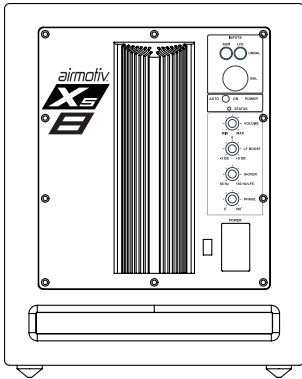
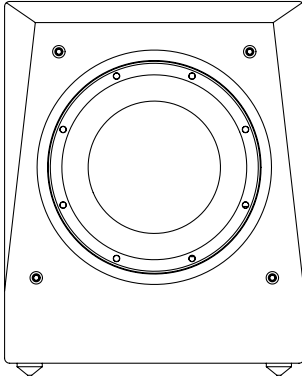
### Mechanical

*Dimensions:* 17-1/4" high x 14-1/4" wide x 17-1/2" deep (feet included; leave extra room for heat sink and cables).

*Weight:* 66 pounds (boxed).

*Feet:* Permanently attached anti-slip rubber feet.

## Airmotiv XS8



The Airmotiv XS8 is an excellent way to extend the bass response of a smaller audio or home theater system to cover the last few critical octaves of bass with authority and finesse. The XS8 can deliver plenty of low bass to add that final touch of realism to a movie, while still offering the low distortion and precise control you need for accurate, superb sounding music reproduction. While the XS8 is the smallest member of our Airmotiv XS Subwoofer family it can still deliver plenty of clean low bass to offer a truly impressive listening experience in installations where space is at a premium. The Airmotiv XS8 is also a great choice for dual-subwoofer setups.

### Driver Complement

*Driver:* 8" heavy duty long throw subwoofer with cast aluminum frame, 1-1/2" copper voice coil, non-pressed paper cone reinforced with aramid fibers, tough SBR rubber surround, vented pole piece, and forced air cooling.

*Cabinet tuning:* Rear tuned slot port.

### Cabinet

Heavily braced acoustically inert HDF cabinet with removable sculpted fabric-covered grill. The front bezel is finished in several coats of satin finish black lacquer; the sides and rear are covered in tough attractive textured vinyl.

### Electronics

*Amplifier type:* Audiophile quality Class A/B amplifier.

*Amplifier power:* 250 Watts RMS.

*Protection:* Advanced multi-stage low-distortion limiter.

*Frequency response:* 29 Hz - 200 Hz (+/- 3 dB).

*Inputs:* Single XLR balanced input; summed left and right RCA unbalanced inputs.

*Controls:* Crossover, Phase, Volume, LF Boost.

*AC power:* 115 VAC/60 Hz or 230 VAC/50 Hz.

### Mechanical

*Dimensions:* 14-3/4" high x 11-3/4" wide x 15" deep (feet included; leave extra room for heat sink and cables).

*Weight:* 46 pounds (boxed).

*Feet:* Permanently attached anti-slip rubber feet.

## Subwoofer Placement and Configuration

The best location for your subwoofer will depend on a lot of things - including the acoustics of your room, the characteristics of your main speakers, and practical considerations like where you have room for it. (Whole books have been written about the subject - and even experts often disagree.) The important thing is to find a location that delivers the sound you want, and fits with your room decor.

Some frequently chosen locations include: in the front between your main front speakers, in a front or rear corner, or in the center of a side wall or rear wall. Each has advantages and disadvantages, and each may or may not work well in your particular system.

One way of choosing a good location is sometimes humorously referred to as the "subwoofer crawl". To use this method, you connect your subwoofer temporarily to your audio system, place the sub in your normal listening position, where you would normally sit, and play music through it with plenty of bass. You then crawl around on the floor, stopping and listening at each location where you're considering putting your sub. Once you find the spot where the bass sounds the best and cleanest, you switch places with the subwoofer, placing it in the location where the bass sounded the best. This often turns out to be a good location for your subwoofer.

How you configure your Airmotiv XS Subwoofer will depend on the type of system you have.

**Note: Your Airmotiv XS Subwoofer contains a powerful Class A/B amplifier. The heat sinks for this amplifier are attached to the back of the subwoofer, in the center of the amp plate. IT IS NORMAL FOR THE HEAT SINKS TO GET QUITE WARM when your subwoofer is played loudly for extended periods of time.**

**WARNING: YOU MUST ALLOW SEVERAL INCHES OF CLEARANCE BETWEEN THE REAR PLATE OF YOUR XS SUBWOOFER AND THE NEAREST WALL OR OTHER SURFACE TO ALLOW AIR FLOW AROUND THE HEAT SINK FINS TO ENSURE ADEQUATE COOLING! DO NOT PUSH THE REAR PANEL OF YOUR XS SUBWOOFER TIGHT AGAINST A WALL! DO NOT PUSH THE REAR OF THE UNIT AGAINST DRAPES OR SOFT FURNITURE THAT WILL BLOCK AIR FLOW TO THE REAR HEAT SINK FINS! (Your XS subwoofer includes internal safety protection against overheating, but operating it for excessive periods of time without adequate cooling will impair proper operation and shorten component life.)**

### Configuring your XS Subwoofer to Work with an AVR or Processor

Setting your XS subwoofer to work with an AVR or pre/pro that has its own bass management is quite simple (this will work for most systems that have a subwoofer output).

1. Connect the subwoofer or LFE output on your pre/pro or receiver to the one of the inputs on your XS subwoofer.
2. Set the Crossover Control on the XS subwoofer fully clockwise (to 150 Hz / LFE).
3. Set the Volume Control on the XS subwoofer to a setting where the level of the low bass seems about right by ear.

4. Adjust the Phase Control to the setting where you hear the MOST bass in the frequency range where the subwoofer overlaps with your main speakers.

5. Use the adjustments on your receiver or pre/pro to dial your settings in perfectly, or run the automatic room correction and let it do all the work for you. The procedure will be slightly different on each system because each piece of equipment offers different manual controls and different automatic options.

If your AVR or pre/pro has a full range subwoofer output (but not bass management), then there's one additional step.

5a. AFTER you've set the Phase Control for the most bass, go back and adjust the Volume and Crossover Controls for the best sound. The Crossover Control controls the overlap between your subwoofer and your main speakers; you want to set it so that your subwoofer blends smoothly with your main speakers, without a bump or dip where they overlap, and without a sharp transition from one to the other. The Volume Control is used to set the relative level between your subwoofer and main speakers. A good rule of thumb is that the bass should sound solid, but you should not hear the subwoofer as a separate sound source

6. Finally, after you've adjusted your XS subwoofer for the flattest response, you can use the LF boost control to fine tune the very low frequency response to your personal preference.

**Note: The way your main speakers and subwoofer blend together will sound slightly different at different locations in the room. These adjustments should be made by listening at your normal listening location. If your equipment is located across the room, walk back to your favorite chair and listen to the results from there each time you make an adjustment.**

**Note: After you've configured everything on your pre/pro, or used your automatic room correction to do so, you should AVOID changing the Crossover and Phase Control settings on your XS subwoofer as this will change the way it sounds. However, you may use the Volume Control to increase or reduce the overall amount of bass to suit your taste, and the LF Boost control to fine tune the amount of low bass.**

### **Configuring your Airmotiv XS Subwoofer Manually**

If you're connecting your XS subwoofer to a stereo system that doesn't have a subwoofer output, you'll be using the controls on the XS subwoofer so that it blends smoothly with your main speakers.

1. First you'll need to take a set of main outputs and connect them to BOTH inputs on your XS subwoofer. It doesn't matter which channel you connect to which input since they're summed together. If you only have one set of main outputs, you can use a pair of splitter cables to send a copy of those signals to your XS subwoofer.

2. Start with the Volume Control all the way down; with the Phase Control set to 0 degrees, and with the Crossover Control set to the far right - to 150 Hz.

3. Now, play some music with plenty of bass, and that you are familiar with.

4. Turn the Volume Control up until the amount of bass sounds more or less correct.
5. Use the Phase Control to adjust for the MOST bass in the frequency range where your subwoofer and main speakers overlap.
6. Fine tune the setting on the Volume Control so that the amount of low bass and middle frequencies seem about right in proportion to each other. At this point you'll probably have a bump in the frequency response where the subwoofer and your main speakers overlap.
7. Now, turn the Crossover Control to the left to reduce the overlap between your sub and main speakers until everything sounds best. (At this point you're lowering the crossover frequency to eliminate the overlap between the subwoofer and your main speakers.)
8. If necessary, you can adjust the Volume Control one final time to get things just right.
9. Finally, after you've adjusted your XS subwoofer for the flattest possible response, use the LF Boost control to fine tune the low bass response to your room and personal preference.

***Note: The way your main speakers and subwoofer blend together will sound slightly different at different locations in the room. These adjustments should be made by listening at your normal listening location... If your equipment is located across the room, walk back to your favorite chair and listen to the results from there each time you make an adjustment.***

## Connections

Although the Airmotiv XS subwoofers have no special connection requirements, the following suggestions may be helpful:

- If your source component offers both options, a balanced connection is preferred because balanced connections are less likely to pick up noise, especially with long interconnects, or when cables are run near power cables.
- Always use high-quality interconnects between your subwoofer and your source equipment.
- Keep interconnects as short as possible, and avoid running interconnects next to power cables whenever possible.

***Note: It is especially important to exercise care to avoid hum pickup with the interconnects used for connecting a subwoofer for several reasons. First, the subwoofer is often located furthest from your pre/pro or other signal source, and so has the longest interconnects. Second, hum is going to be more noticeable with a subwoofer than with other speakers because a subwoofer reproduces low frequencies so well and so powerfully. And, third, because hum is a bass frequency, and the optimum location for a subwoofer is often also the spot where bass is most effectively coupled to the listening area.***



## Care and Maintenance

### *Periodic Maintenance*

Your Airmotiv XS Subwoofer requires no periodic maintenance or calibration.

### *Cleaning the Cabinet and Baffle*

- The cabinet of your Airmotiv XS Subwoofer should normally be cleaned with a rag dampened with plain water. **DO NOT** spray water directly onto or into the speaker and **DO NOT** use abrasive or chemical cleaners. Gently dry the surface with a clean soft rag after cleaning.
- If necessary, use a mild detergent, wipe the surface with a rag dampened with plain water afterwards to rinse it, and then gently dry the surface with a clean soft rag.
- If something nasty does get on the sides or top of your XS subwoofer, use a rag dampened with a weak solution of dish detergent or other mild cleaning liquid, followed by a rag dampened with plain water, and then dry with a clean rag.

### *Cleaning the Grill Cloth*

- 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 or soft brush. Avoid using brushes with stiff bristles that may pull or damage the grill cloth.

**Note: DO NOT use any sort of liquid or wet cloth on the woofer cone or grill.**



## Emotiva Audio Corporation Limited Warranty

Emotiva Airmotiv XS Subwoofers are covered by a five-year transferable limited warranty. For detailed information about the warranty, and instructions on how to request warranty service if you ever need it, please refer to the following link (or click on the QR code):

[www.emotiva.com/warranty](http://www.emotiva.com/warranty)



For more information about the Airmotiv XS Subwoofers, or information about other Emotiva products, please visit our website at:

[www.emotiva.com](http://www.emotiva.com)



**Notes**

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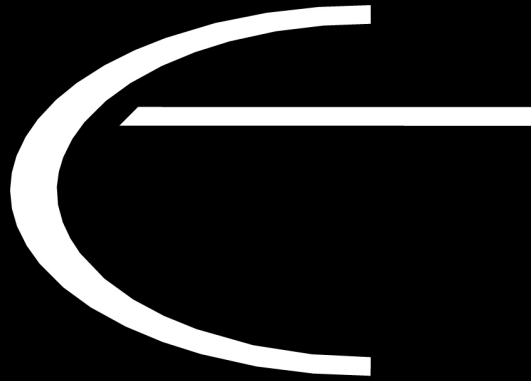
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All information contained in this manual is accurate to the best of our knowledge at the time of publication. In keeping with our policy of ongoing product improvement, we reserve the right to make changes to the design and features of our products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





Emotiva Audio Corporation  
135 Southeast Parkway Court  
Franklin, TN 37064

[www.emotiva.com](http://www.emotiva.com)