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# airmotiv+

Loudspeaker Series User Manual



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## **Airmotiv Speakers**

## Contents

Airmotiv Speakers	1
Introduction	3
About This Manual	4
Features	5
Unpacking	6
Emotiva Airmotiv Speakers	7
Airmotiv T0	9
Airmotiv T1+	10
Airmotiv T2+	11
Airmotiv B1+	12
Airmotiv C1+	13
Airmotiv C2+	14
Airmotiv A1 AirSpace™	15
Airmotiv E2+	16
Quick Start	17
Connections	18
Speaker Placement	19
Mounting the Airmotiv E2+	21
Switch Settings on the Airmotiv E2+	22
Mounting the Airmotiv A1	23
Care and Maintenance	24
Emotiva Audio Corporation Five-Year Limited Warranty	25
Notes	28





## **Introduction**

Thank you for purchasing our new Emotiva Airmotiv™ loudspeakers.

The Emotiva Airmotiv series of speakers represents the culmination of years of research and experience in producing home and professional loudspeakers offering both excellent technical performance and superb sound quality. Our Airmotiv speakers were designed from the start to be equally at home in an audiophile stereo system or a high-end home theater.

Our design philosophy is simple: if a speaker can reproduce the entire audible spectrum, as accurately as possible, with very little distortion or coloration, then it will sound good - whether you're playing classical music, or jazz, or the sound track of your favorite blockbuster movie.

For high-frequency reproduction, we chose our Airmotiv<sup>™</sup> folded ribbon tweeter. This tweeter, which we introduced in our Airmotiv Stealth studio monitors, offers excellent frequency response, very low distortion, great detail retrieval, and high power handling capability. And, last but certainly not least, the Airmotiv folded ribbon tweeter sounds superb at all listening levels.

For middle and low frequencies we chose advanced woven fiber cones, which deliver smooth response over the entire audio spectrum, and blend well with our Airmotiv tweeters.

The crossover network used in each Airmotiv speaker was carefully designed and optimized to work perfectly with the drivers we chose for each, and features audiophile quality film capacitors, air core inductors, and precision resistors in critical locations.

The Airmotiv speaker cabinets are crafted from thick, heavily braced, acoustically inert HDF to ensure maximum rigidity and resistance to stray vibration; the front panel is machined from a solid slab of 25mm HDF. The faceted front panel design, borrowed from our studio monitors, not only adds a stylishly futuristic look to our Airmotiv speakers, but also serves a very practical purpose - to minimize diffraction effects and room interactions. The front panels are coated with multiple coats of attractive satin-finish black lacquer, which looks elegant while resisting fingerprints and scratches, and the sides are covered with tough, good looking textured black vinyl. And, for those of you who prefer to keep their technology under wraps, all of our new Airmotiv speakers include removable, magnetically-attached, grilles.

All of the speakers in our new Airmotiv series are carefully timbre-matched, so you can feel free to mix and match whichever models are most appropriate to your particular installation requirements.

The Airmotiv T1+ and T2+ towers have sufficiently extended bass response to be used without a subwoofer for stereo music; the Airmotiv T0 tower is perfect for systems where space is at a premium; and the smaller Airmotiv B1+ bookshelf monitors, while they have a somewhat more limited bass output, offer a well-balanced sound, and may also be used without a subwoofer. For home theater applications, or where prodigious amounts of bass are required, we recommend a subwoofer. The Airmotiv C1+ and C2+ are superb quality center channel speakers, which deliver crystal clear easily intelligible dialog. The Airmotiv E2+ features dual high frequency drivers, and can be configured as either a direct radiating bipole or dipole surround. The Airmotiv A1 AirSpace, the newest member of the Airomtov family, is designed for use with the latest immersive surround sound formats, and can be mounted on a wall as a direct firing surround sound speaker, or configured as an upward-firing ceiling reflected height speaker.

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 Airmotiv speakers.

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 Quick Start section (on page 17); 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**

The Emotiva Airmotiv speakers were designed to deliver superb sound for any audiophile stereo or home theater sound system. When paired with any high-quality power amplifier, all of the Airmotiv speakers will deliver clean, uncolored, properly balanced sound with very low distortion and outstanding rendition of even the finest details. All of the speakers in the Airmotiv series were carefully timbre matched to work well together, and to deliver a cohesive audio image in any stereo or surround sound installation.

The following are a few of the feature highlights of the entire line of Airmotiv speakers:

- **Airmotiv™ high-frequency transducers** deliver flat frequency response, low distortion, virtually nonexistent signal compression, smooth off-axis response, superb transparency, and uncanny imaging.
- Advanced woven fiber midrange transducers deliver smooth frequency response, and lifelike, detailed midrange with very low coloration.
- Advanced woven fiber low-frequency transducers with high-temperature voice coils and vented pole pieces deliver clean, crisp bass at all listening levels.
- **Minimum Acoustic Signature™ cabinet** the angled exterior contours on the Airmotiv speakers serve to minimize diffraction effects and room interactions. The acoustically inert 25 mm milled HDF front panels, 15 mm side and rear panels (18 mm on the T2+), and extensive bracing, serve to further reduce vibrations, and contribute to the Airmotiv speakers clean precise imaging.
- **Tough yet attractive exterior** several coats of satin-finish lacquer give the front bezel of the Airmotiv speakers an elegant understated appearance, while a tough yet attractive vinyl covering protects the sides and rear from damage and fingerprints.
- **Magnetic grilles** provide a convenient way to keep your technology under wraps, and are easily removed for cleaning or for showing your Airmotiv speakers off to your audiophile friends.
- Use them with or without the removable grilles the front bezel on the Airmotiv speakers is finished with an attractive satin finish black lacquer, so they look great with the grilles on or off; choose the look that fits your system and your room decor.
- **Precision crossovers** carefully designed and optimized to work perfectly with the drivers in each Airmotiv speaker model feature audiophile quality film capacitors, air core inductors, and precision resistors in critical locations.
- **Bi-amp terminals** The Airmotiv T1+ and T2+ towers, the Airmotiv C1+ and C2+ center channel speakers, and the Airmotiv E2+ surround speaker, allow you to access the woofer and midrange/tweeter sections of the speaker separately for bi-amping or bi-wiring.
- **Full five year warranty** ensures that you'll be able to enjoy your Airmotiv speakers for years to come.

You can find more information about the Emotiva Airmotiv speakers on our website at www.emotiva.com.



## **Unpacking**

Your Airmotiv 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 Airmotiv loudspeakers from the packing carton 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 opening.

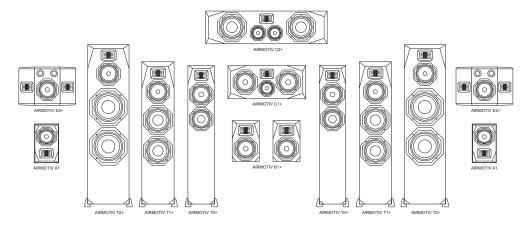
Be sure to locate all extra parts, such as detachable floor spikes and rubber feet, which may be stored in spaces in the packing material.

It is important to save the box and all packing materials in case your Airmotiv 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 Airmotiv Speakers**



The Airmotiv series of loudspeakers is designed to deliver superb performance in any audiophile stereo or home theater sound system. The Airmotiv series includes three different tower loudspeakers, two different center channel models, and two different surrounds, each with slightly different capabilities, as well as a bookshelf monitor model, so we're sure you'll be able to find the perfect combination of Airmotiv speakers for your particular room and system.

The Airmotiv T1+ and T2+ are full sized tower loudspeakers, intended to serve as your main speakers in a stereo system, and as front main speakers in a home theater system. The Airmotiv T1+ and T2+ towers may be used with or without a subwoofer; and a full set will deliver truly impressive performance in a large home theater installation. The Airmotiv T2+ is slightly larger than the Airmotiv T1+, and has more low bass output and slightly greater dynamic range. The Airmotiv T0 has slightly less bass output than the larger towers, but still delivers perfectly balanced sound, and is a great solution where space is at a premium.

The Airmotiv C1+ and C2+ are designed to serve as the center channel loudspeaker in a high-quality home theater system, and pair perfectly with the Airmotiv towers.

The Airmotiv B1+ is a small, full range monitor loudspeaker, designed to serve as a main speaker in a high-quality small or desktop stereo system, or as a main or surround sound speaker in a small home theater system. The Airmotiv B1+ may be stand mounted, or placed on a bookshelf or table.

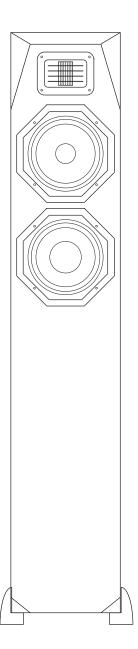
The Airmotiv A1 AirSpace™ was designed to be used as a height channel with the latest immersive audio formats, and can be mounted on a wall, or configured to fire upwards, delivering optimally contoured height information via reflection from the ceiling. The Airmotiv E2+ is a larger surround sound speaker, and offers the option of being configured in several different ways to provide the best surround sound experience in your particular system. The Airmotiv E2+ may be configured as a standard direct radiating speaker (a bipole) and also offers three other options (two different dipole configurations and a reverse bipole configuration).

The Airmotiv T1+ and B1+ have sufficient low frequency extension to be used for music without a subwoofer, but may benefit from a subwoofer when used for home theater applications. The Airmotiv T2+ has even more powerful low bass extension, and will provide excellent performance in a music system without a subwoofer. In large home theater systems, a subwoofer is usually recommended for optimum low bass response.





## **Airmotiv T0**



The Airmotiv T0 is a two way, floor standing, tower loudspeaker, featuring a 32 mm Airmotiv folded ribbon tweeter, and a pair of 5-1/4 inch woven fiber drivers. The dual 5-1/4 inch drivers share the same 2500 Hz electrical crossover frequency, but the upper one is optimized for the critical midrange frequencies, while the lower one is optimized for low frequency response. The Airmotiv T0 is ideal for any stereo or home theater system where both excellent sound quality and a compact footprint are needed.

AIRMOTIV SPEAKERS

#### **Driver Complement**

High frequency driver: 32 mm Airmotiv folded ribbon tweeter.

Midrange driver: 5-1/4 inch woven fiber cone. Low frequency driver: 5-1/4 inch woven fiber cone.

Cabinet type: Rear ported .

#### **Electrical Specifications**

Efficiency: 87 dB (2.83V/1m).

Power handling: 100W continuous / 200W peak.

Nominal impedance: 4 ohms.

Frequency response: 48 Hz - 28 kHz (+3/-3 dB).

#### Mechanical

Dimensions (without feet):

38-1/8 inches high x 8-9/16 inches wide

x 10-1/2 inches deep.

Dimensions (including feet):

37-3/4 inches high x 7-1/16 inches wide

x 10-1/2 inches deep.

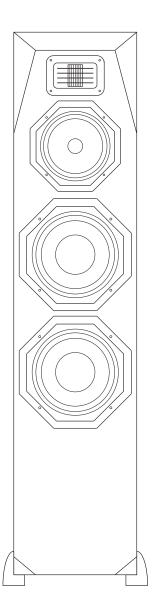
Weight: 29 pounds

Mounting: Outrigger feet (permanently attached),

adjustable detachable spikes and rubber feet included .

Grille: Black cloth over a rigid frame; covers the top driver portion of the front panel; attaches securely with

## Airmotiv T1+



The Airmotiv T1+ is a three way, floor standing, tower loudspeaker, featuring a 32 mm Airmotiv folded ribbon tweeter, a 5-1/4 inch woven fiber midrange, and dual 6 inch woven fiber woofers. The Airmotiv T1+ can be used in an audiophile stereo setup, or as a main front speaker in a home theater installation, or you could use Airmotiv T1+'s all around in a high end home theater installation.

#### **Driver Complement**

High frequency driver: 32 mm Airmotiv folded ribbon tweeter.

Midrange driver: 5-1/4 inch woven fiber cone.

Low frequency drivers: 6 inch woven fiber cones (2).

Cabinet type: Rear ported.

#### **Electrical Specifications**

Efficiency: 88 dB (2.83V/1m).

Power handling: 150W continuous / 300W peak.

Nominal impedance: 4 ohms.

Frequency response: 37 Hz - 28 kHz (+3/-3 dB). Dual speaker terminals for bi-amping or bi-wiring.

#### Mechanical

Dimensions: 38-1/4 inches high x 9-7/8 inches wide

x 11-5/8 inches deep.

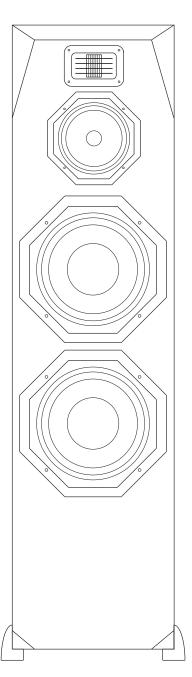
Weight: 40.1 pounds.

Mounting: Outrigger feet (permanently attached),

adjustable detachable spikes and rubber feet included.

Grille: Black cloth over a rigid frame; attaches securely with

## **Airmotiv T2+**



The Airmotiv T2+ is a three way, floor standing, tower loudspeaker, featuring a 32 mm Airmotiv folded ribbon tweeter, a 5-1/4 inch woven fiber midrange, and dual 8 inch woven fiber woofers. The Airmotiv T2+ can be used in an audiophile stereo setup, or as a main front speaker in a home theater installation, or you could use a full set of Airmotiv T2+'s as the basis of a really high end home theater installation.

#### **Driver Complement**

High frequency driver: 32 mm Airmotiv folded ribbon tweeter.

Midrange driver: 5-1/4 inch woven fiber cone.

Low frequency drivers: 8 inch woven fiber cones (2).

Cabinet type: Rear ported .

#### **Electrical Specifications**

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

Power handling: 200W continuous / 400W peak.

Nominal impedance: 4 ohms.

Frequency response: 35 Hz - 28 kHz (+3/-3 dB). Dual speaker terminals for bi-amping or bi-wiring.

#### Mechanical

Dimensions: 42-11/16 inches high x 12-3/16 inches wide

x 12-1/4 inches deep.

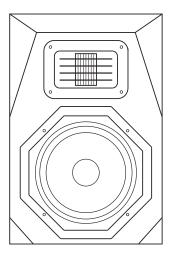
Weight: 56.9 pounds.

Mounting: Outrigger feet (permanently attached),

adjustable detachable spikes and rubber feet included.

Grille: Black cloth over a rigid frame; attaches securely with

## **Airmotiv B1+**



The Airmotiv B1+ is a two way, bookshelf monitor loudspeaker, featuring a 32 mm Airmotiv folded ribbon tweeter and a 5-1/4 inch woven fiber woofer. The Airmotiv B1+ is ideal for use in a small, high-quality two-channel system, and also works well as a home theater speaker in systems where you prefer not to use wall-mounted speakers.

#### **Driver Complement**

High frequency driver: 32 mm Airmotiv folded ribbon tweeter.

Low frequency drivers: 5-1/4 inch woven fiber cone.

Cabinet type: Rear ported.

#### **Electrical Specifications**

Efficiency: 86 dB (2.83V/1m).

Power handling: 70W continuous / 150W peak.

Nominal impedance: 8 ohms.

Frequency response: 48 Hz - 28 kHz (+3/-3 dB).

#### Mechanical

Dimensions: 10-3/4 inches high x 7-1/8 inches wide

x 8-1/4 inches deep.

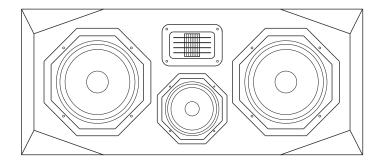
Weight: 8.8 pounds.

Mounting: Shelf or stand mounted; shock absorbing

rubber bottom pad.

Grille: Black cloth over a rigid frame; attaches securely with

## **Airmotiv C1+**



The Airmotiv C1+ is a three way center channel loudspeaker, featuring a 32 mm Airmotiv folded ribbon tweeter, a 3 inch woven fiber midrange, and dual 5-1/4 inch woven fiber woofers. The Airmotiv C1+ is designed to be used as a center channel speaker in high end home theater installations.

#### **Driver Complement**

High frequency driver: 32 mm Airmotiv folded ribbon tweeter.

Midrange driver: 3 inch woven fiber cone.

Low frequency drivers: 5-1/4 inch woven fiber cones (2).

Cabinet type: Sealed.

#### **Electrical Specifications**

Efficiency: 89 dB (2.83V/1m).

Power handling: 120W continuous / 250W peak.

Nominal impedance: 4 ohms.

Frequency response: 50 Hz - 28 kHz (+3/-3 dB). Dual speaker terminals for bi-amping or bi-wiring.

#### Mechanical

Dimensions: 8-3/8 inches high x 20-1/2 inches wide x 8-1/4 inches deep.

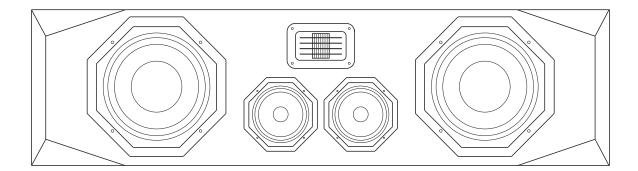
Weight: 18.6 pounds.

Mounting: Shelf or stand mounted; shock absorbing rubber bottom pad.

Grille: Black cloth over a rigid frame; attaches securely with powerful magnets for easy removal.



## **Airmotiv C2+**



The Airmotiv C2+ is a three way center channel loudspeaker, featuring a 32 mm Airmotiv folded ribbon tweeter, dual 3 inch woven fiber midrange drivers, and dual 6 inch woven fiber woofers. The Airmotiv C2+ is designed to be used as a center channel speaker in high end home theater installations.

#### **Driver Complement**

High frequency driver: 32 mm Airmotiv folded ribbon tweeter.

Midrange driver: 3 inch woven fiber cones (2).

Low frequency drivers: 6 inch woven fiber cones (2).

Cabinet type: Rear ported.

#### **Electrical Specifications**

Efficiency: 92 dB (2.83V/1m).

Power handling: 150W continuous / 300W peak.

Nominal impedance: 4 ohms.

Frequency response: 45 Hz - 28 kHz (+3/-3 dB). Dual speaker terminals for bi-amping or bi-wiring.

#### Mechanical

Dimensions: 8-5/8 inches high x 31-15/16 inches wide x 10-1/2 inches deep.

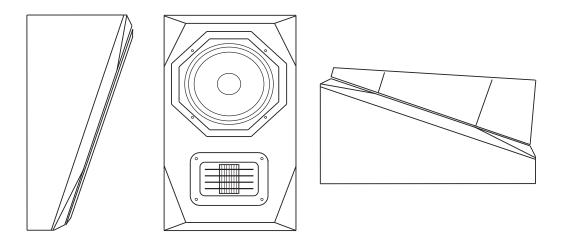
Weight: 36.1 pounds.

Mounting: Shelf or stand mounted; shock absorbing rubber bottom pad.

Grille: Black cloth over a rigid frame; attaches securely with powerful magnets for easy removal.



## Airmotiv A1 AirSpace™



The Airmotiv A1 AirSpace<sup>™</sup> is a two way loudspeaker, featuring a 32 mm Airmotiv folded ribbon tweeter and a 4 inch woven fiber woofer, which can be used as a wall mounted direct firing surround sound or height channel speaker, or a ceiling bounce height channel speaker, with any standard or immersive surround sound system.

The Airmotiv A1 is designed to work perfectly with both standard surround sound systems, and the new immersive surround sound systems, like Dolby Atmos and DTS-X, in a wide variety of listening room conditions.

#### **Driver Complement**

High frequency driver: 32 mm Airmotiv folded ribbon tweeter.

Low frequency driver: 4 inch woven fiber cone.

Cabinet type: Sealed.

#### **Electrical Specifications**

Efficiency: 85 dB (2.83V/1m).

Power handling: 60W continuous / 120W peak.

Nominal impedance: 8 ohms.

Frequency response (switch in flat position): 75 Hz - 28 kHz (+3/-3 dB).

Boost (switch in +3 dB position, recommended for reflection mode): approximately +3 dB @ 7 kHz.

#### Mechanical

Dimensions: 10 inches long x 6-1/8 inches wide x 5-1/8 inches thick.

Weight: 7.5 pounds.

Mounting (configuration #1): Wall mounted (rear bracket with keyway and rubber feet provided).

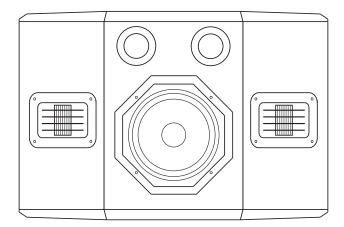
Mounting (configuration #2): Facing upwards to reflect off ceiling (rubber feet provided).

Grille: Black cloth over a rigid frame; attaches securely with powerful magnets for easy removal.

(Two interchangeable grills provides: flat grill and countoured directivity control grill).



## **Airmotiv E2+**



The Airmotiv E2+ is a very flexible two way, wall mounted surround sound loudspeaker, featuring dual 32 mm Airmotiv folded ribbon tweeters and a 5-1/4 inch woven fiber woofer. The Airmotiv E2+ can be configured in a variety of ways, enabling you to optimize the surround sound experience to your particular system and room. (The Airmotiv E2+ can be configured as a conventional direct radiating bipole speaker, as a reverse bipole, or as either of two different types of dipole.)

#### **Driver Complement**

High frequency driver: 32 mm Airmotiv folded ribbon tweeter.

Low frequency driver: 5-1/4 inch woven fiber cone.

Cabinet type: Dual front ports.

#### **Electrical Specifications**

Efficiency: 87 dB (2.83V/1m).

Power handling: 70W continuous / 150W peak.

Nominal impedance: 8 ohms.

Frequency response: 65 Hz - 28 kHz (+3/-3 dB). Dual speaker terminals for bi-amping or bi-wiring.

#### Mechanical

Dimensions: 10-3/16 inches high x 15-1/16 inches wide x 5-9/16 inches deep.

Weight: 11.2 pounds.

Mounting: Heavy duty steel wall bracket.

Grille: Multiple sections; each section consists of black cloth over a rigid frame; and each attaches securely with powerful magnets for easy removal.

## **Quick Start**

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

- Find secure locations for your Airmotiv loudspeakers.
- Before using the Airmotiv T1+ and T2+ tower models, attach the appropriate feet. (The Airmotiv towers include both carpet spikes and rubber feet. Carpet spikes are recommended for use with carpeted floors, but may damage hardwood or tiled floors.)
- The Airmotiv A1 may be mounted on a wall, and used as a surround or height speaker, or placed on top of one of your main speakers and used as a ceiling bounce height speaker. For use as a direct radiating surround speaker, we suggest using the flat grill, and the small keyway mounting bracket, and setting the tweeter level switch fo flat. For use as a ceiling bounce height speaker, we suggest using the contoured directivity control grill, the rubber feet, and setting the tweeter level switch to +3 dB.
- The Airmotiv E2+ is a configurable bipole/dipole surround sound speaker, and includes two switches which can be used to configure it for various modes of operation. Be sure to configure your Airmotiv E2+ speakers the same, or as a symmetrical pair, for proper imaging. The E2+ includes a metal mounting bracket, which is attached to the wall; four mounting screws on the rear panel of the E2+ then attach to the mounting plate by way of secure keyways.
- The Airmotiv B1+, Airmotiv C1+, and Airmotiv C2+ should be positioned on an appropriate table, shelf, or speaker stand. They include integral vibration absorbing rubber pads on the bottom, which also serve to protect the surface on which they rest.
- Connect your Airmotiv speakers to your power amp or receiver using good quality speaker cables.
- Find some music you really like to listen to.
- Enjoy!

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



## **Connections**

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

- Always use high-quality speaker wire of reasonable gauge (16 gauge or heavier)
- If you must use thinner wire, try to keep the length as short as possible
- Be careful to wire both (or all) speakers "in phase" (the plus/red terminal on each speaker to the plus/red terminal on your amp)
- Try to use wires of equal length and gauge for symmetrical pairs of speakers (don't use a long 16 gauge wire for your Left Front and a short 10 gauge wire for the Right Front)
- If you use stranded cables, use care to avoid short circuits (from stray strands touching)
- Emotiva offers very high quality pre-made speaker cables at reasonable prices (you will find them in the Interconnects section of our website at www.emotiva.com)

Several of the Airmotiv speakers provide separate speaker terminals for the woofer and midrange/tweeter sections which allow them to be bi-wired or bi-amped. If you plan to bi-amp or bi-wire your Airmotiv speakers, be sure to remove the jumpers between the two sets of speaker terminals on the rear of the speaker before connecting your amplifier(s).

## **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. Many surround sound standards have specific recommendations about the optimum position for each speaker, and the different surround sound systems recommend slightly different locations. The important thing to remember is that each room is different, and so these recommendations should be considered to be guidelines rather than rules; you should always position your speakers where they sound the best to you, in your room, with your other equipment.

The Airmotiv E2+ surround speakers can be configured as either bipole or dipole speakers (when configured as a dipole, either tweeter may be configured as the in-phase side). While various surround sound standards recommend one or the other type of surround speaker, we recommend trying various combinations to determine which works best in your particular application. In general, the bipole configuration will provide more precise localization, while the dipole options will provide a more diffuse presentation.

(In this section we're going to offer some recommendations you may try. However, we strongly recommend that you experiment, try several different locations, and pick the one that works best in your system.)

The Airmotiv T1+ and T2+ towers are intended to stand directly on the floor (with the carpet spikes or rubber feet), and should not be placed on top of other objects, stands, or furniture. The Airmotiv B1+ bookshelf monitors and Airmotiv C1+ and C2+ center channel speakers are intended to be positioned on speaker stands, tables, or shelves. The Airmotiv E2+ surround speakers are typically mounted on the side or rear walls.

The Airmotiv A1 surrounds may be mounted on a side wall as a direct radiating surround speaker, high on a side wall as a direct radiating height speaker, of placed on top of your main speakers as a ceiling reflection height speaker.

#### **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 toein (so that the speakers directly face the listening position) will make the sound stage more focused.
- 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.
- If bookshelf speakers like the Airmotiv B1+ are placed on a table or shelf, they will usually sound best if positioned at the front edge of the shelf (so sound doesn't reflect from a flat surface directly in front of them). If they must be placed towards the rear of a deep shelf, consider covering the surface directly in front of them with a felt pad or towel.
- For wall-mounted speakers, try to mount them at head height for a seated listener. If speakers are mounted on brackets significantly above head height, consider slanting them downwards so they face the listener's head.

#### Guidelines for home theater / surround sound speaker placement:

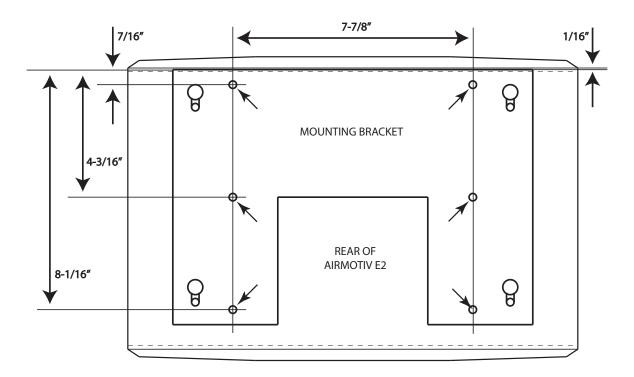
- It's best to use speakers that all use similar technology, and that are "timbre matched" to each other. If this is impossible, then at least the front left, front right, and center speakers should be well matched.
- In a typical 5.1 channel installation, the surround speakers should be located directly to the sides of the primary listening position.
- In a typical 7.1 channel installation, the side surround speakers should be located to the sides, and slightly forward or behind the listener; the rear surrounds may be located on the rear wall, or far back on the side walls and angled forward.
- In a typical immersive surround sound system, the Airmotiv A1 height channels may be mounted high on the side walls, or placed on top of your main front and surround speakers, and configured to fire vertically, with their output reflecting off the ceiling. For best results with immersive surround sound formats like Dolby Atmos, we recommend mounting the A1's to fire upwards, with their directivity control grills installed, the tweeter positioned closest to the listener, and the tweeter level switch set to +3 dB.
- Remember that the goal is to produce a consistent sound stage that surrounds you, where sounds associated with moving objects move smoothly from left to right and from front to back.
- While many pre/pros, like our XMC-1, offer automatic room correction, you will get the
  best results if you start with your speakers in locations that offer good imaging and
  great sound to begin with.
- In a surround sound installation, either all speakers should be the same, or the surround speakers should be smaller than the main speakers.
- In an immersive surround sound system, you can obtain great results with a combination of E2+'s for surrounds and A1's as height speakers. A1's may also be used as surround speakers as well as height speakers. If you do so, you may want to mount the A1's slightly higher than you would a typical surround sound speaker.

## **Mounting the Airmotiv E2+**

Airmotiv E2+ surround speakers are each supplied with a custom heavy duty steel mounting bracket. Affixed to the rear panel of each Airmotiv E2+ are four mounting screws with raised head-studs, each surrounded on the rear surface of the speaker by a rubber pad.

The mounting bracket should be secured to your wall using the appropriate mounting hardware for your wall construction. Once the mounting bracket is securely fastened to the wall, the speaker is mounted to it by pressing the speaker back against the bracket so that the four screws enter the mounting holes in the bracket, then sliding the speaker downwards so that the screw studs in the speaker fully engage the keyways in the mounting bracket. (You may find that you need to loosen the mounting screws on the rear of the Airmotiv E2+'s in order to ensure a snug but not forced fit with the bracket).

To remove the speaker for cleaning or to adjust the switches, simply slide the speaker upwards, then pull it forward away from the wall.

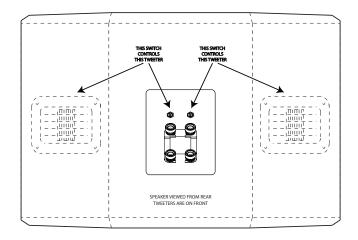


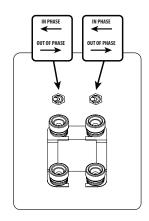
Note six (6) wall bracket mounting holes.



## **Switch Settings on the Airmotiv E2+**

The Airmotiv E2+ surround sound speaker is extremely flexible. Each of the tweeters on the Airmotiv E2+ may be individually configured to be in-phase or out-of-phase with the midrange/woofer using the two small switches on the rear of the speaker. These switches ONLY affect the phase of the tweeters.





The Airmotiv E2+ will provide the most precise sound imaging and localization when configured as a conventional direct firing or "bipole" surround speaker, and this is what most modern surround sound standards recommend. To configure the Airmotiv E2+ for this mode, simply set both switches on each Airmotiv E2+ to IN-PHASE.

In some circumstances, especially in small rooms or when the surround speakers are very close to the listener, you may find that sound originating from your E2+ surround speakers is too easy to localize. If you prefer a more diffuse presentation, you may prefer one of the dipole configurations. The dipole configurations produce sound which is more diffuse, where voices and individual sounds tend to be difficult to localize, and which may sound more pleasing with certain surround sound content - and more like typical room ambiance.

To configure a pair of your Airmotiv E2+ speakers to operate in dipole mode, set ONE of the tweeter switches on each speaker of the pair to its OUT-OF-PHASE position. It is VERY important when doing so to maintain left-right symmetry. This means that, if you're configuring your surround speakers, you must either set both tweeters closest to the front of the room out-of-phase, or set both tweeters closest to the back of the room out-of-phase, and not one of each. Setting the rear-most tweeters on both surrounds out-of-phase will produce an effect typical of most standard dipole speaker, while setting the front-most tweeters out-of-phase will produce a slightly different effect. Neither setting is more correct, so choose the one that sounds best to you. (If you're configuring rear surrounds mounted on your back wall, be sure that the two tweeters closest to the center are set the same to maintain symmetry.)

The Airmotiv E2+ also has a third special mode; inverse bipole. That mode is configured by setting both tweeters on each E2+ out-of-phase, and will produce a somewhat different effect, which you may also wish to consider.

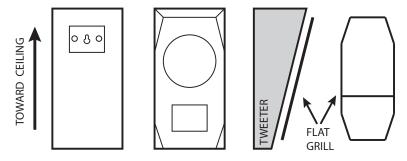
## Mounting the Airmotiv A1 AirSpace™

The Airmotiv A1 AirSpace™ speaker can be used in two different configurations, and can be used as a surround or height speaker, with either a standard surround sound system or one of the new immersive surround sound formats.

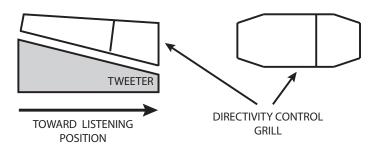
In one configuration, the Airmotiv A1 can be mounted on a wall, either slightly above head level, as a direct firing surround speaker, or close to the ceiling, as a direct firing height channel speaker. In this configuration, we typically recommend using the provided keyhole mounting plate, along with two rubber feet attached near the lower end of the speaker, and the flat grill, and setting the tweeter level switch to its flat position.

In the second configuration, the Airmotiv A1 can be placed on top of one of your main speakers, as a ceiling reflected height channel, for use with one of the latest immersive surround sound formats - including Dolby Atmos or DTS:X. In this configuration, we suggest using the four self adhesive rubber feet, attaching the directivity control grill as shown, positioning the A1 so that the tweeter is closest to the listening position, and setting the tweeter level control to its +3 dB boost position.

While it is possible to place the A1 on top of a cabinet or shelf, near the ceiling, facing upwards to bounce sound off the ceiling, this is usually not optimum. If you choose to do so, you should make sure to leave at least several feet between the front of the A1 and the ceiling.



**A1 WALL MOUNT SURROUND CONFIGURATION** (use keyhole mounting plate; switch to flat position)



**A1 CEILING REFLECTED HEIGHT CONFIGURATION** (use rubber feet on bottom; switch to +3 dB position)

## **Care and Maintenance**

### **Periodic Maintenance**

Your Airmotiv loudspeakers require no periodic maintenance or calibration.

### Cleaning the Cabinet and Baffle

- The cabinets of the Airmotiv loudspeakers 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 Airmotiv speaker, 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 midrange and woofer cones, and avoid touching the tweeter diaphragm with either your fingers or any sort of cleaning cloth or brush. DO NOT use a vacuum to clean the midrange and woofer cones or tweeter.

## **Emotiva Audio Corporation Five-Year Limited Warranty**

#### What does this warranty cover?

Emotiva Audio Corporation (Emotiva) warrants its products against defects in materials and workmanship. This warranty, and all rights provided hereunder, is limited to the original owner. In the event the original owner transfers ownership of the Product prior to the expiration of the applicable term described below, this Warranty shall terminate immediately upon such transfer of ownership.

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?

This warranty commences on the date of retail purchase by the original retail purchaser and runs for a period of five years thereafter. This warranty is non-transferable to any person that owns the warranted product during the Term. 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".

\*Accessories, cables, Big Ego, Little Ego, and remote controls have a one-year warranty to the original owner. The CD transport mechanism on the ERC-3 has a two-year warranty to the original owner.

#### 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; (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) glass or plastic panels, cabinetry, trim or other appearance items; (viii) 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 1-877-EMO-TECH (1-877-366-8324) 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 <u>your responsibility</u>. 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.

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.

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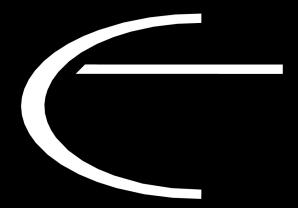
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Notes		

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.

User Manual Revision 1.5 June 2019



Emotiva Audio Corporation 135 Southeast Parkway Court Franklin, TN 37064

www.emotiva.com