

# LOUDSPEAKERS

Model **E3c**

Model **E3b**



**EMP**  
Tek

**USER & INSTALLATION MANUAL**

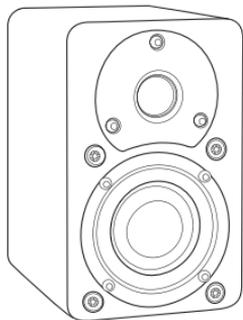


## Introduction

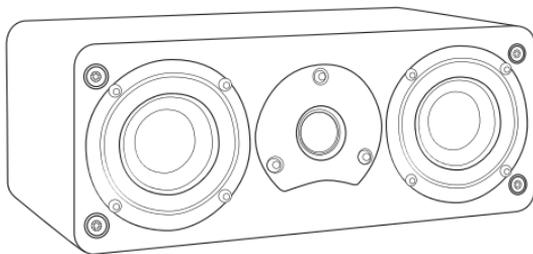
Congratulations on your purchase of EMP E3 Series speakers! Your speakers are the result of many years of research and development dedicated to producing high quality products for home audio systems.

This manual contains features, setup recommendations and specifications for the EMP E3 Series speakers. We recommend you thoroughly read through the material contained in this manual before connecting your speakers. This will ensure you have a good understanding of how to setup your speakers for optimum performance and allow for years of listening enjoyment.

## E3 Series Loudspeakers



**E3b Mini-bookshelf Speaker**



**E3c Center Channel Speaker**

## Break-in Period

Allow several hours of listening time to adequately break-in the speakers. As the speakers break-in, the driver suspensions will loosen. The result of break-in will be an increase in low frequency response, improved definition, and increased clarity and detail.

## Care and Cleaning

To maintain speaker appearance, we recommend wiping them down with a clean and damp, soft cloth. To clean dust from the grilles, use a vacuum with a brush attachment.

## Features

The EMP E3 Series speakers have been designed with 3-inch aluminized polygraphite cone woofers to deliver accurate, time-aligned, sonic performance.

A powerful magnet, extended voice coil and bumped back plate give the bass/midrange drivers high excursion capability. This ensures accurate dynamic reproduction. The center channel drivers are shielded by a steel cup and additional magnet to cancel any stray magnetic field that may cause interference with video equipment such as tube televisions.

A high quality neodymium magnet nano-silk dome tweeter is used for high frequencies. This tweeter is also magnetically shielded, and uses liquid cooling to allow greater power handling.

Each E3 Series speaker features an extensive crossover network. Steep acoustic slope crossovers are used to integrate drivers. The use of steep crossover slopes allows for higher power handling, minimizes driver interaction anomalies, and maximizes the ability of each driver in their respective band of frequencies.

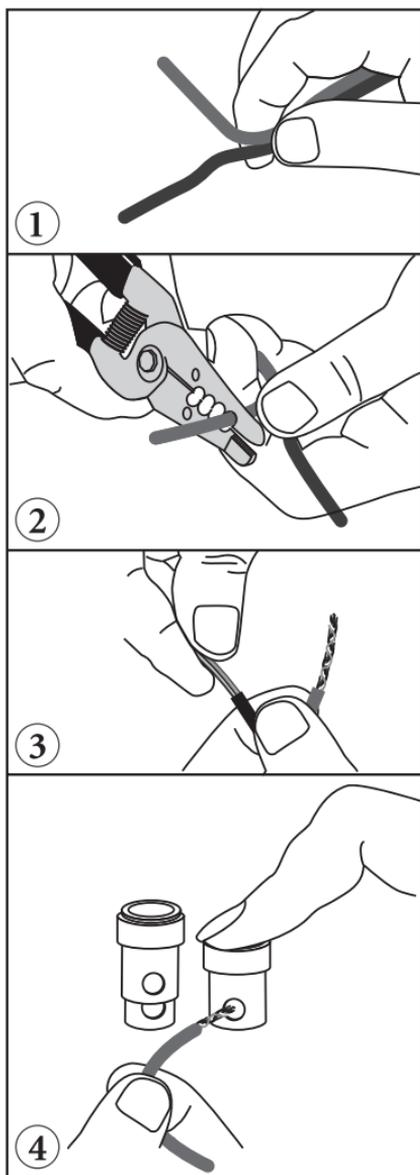
Cabinets are constructed from medium density fiberboard (MDF). The cabinets also have a narrow profile to minimize cabinet diffraction. The speakers virtually disappear leaving only a deep, wide sound stage with pinpoint imaging. The back of the speaker has been ported with a removable foam port plug to adjust base or keep in place for flat wall mount. The E3b and E3c has metal keyhole mounts for direct wall mounting as well as female 1/4-inch 20 TPI threads in back and bottom (E3b only) for optional bracket mounting.

## Attaching Speaker Wires

The E3 Series uses spring-loaded speaker wire terminals to firmly hold either a pin connector or bare speaker wire. To obtain a better connection, it is important to slightly tug on the wires after they have been secured in the terminals. This will cause the small teeth inside the connectors to 'bite' into the wire. It is recommended that you use wire which is color-coded or marked on one side. If the distance is less than 50 feet long from the amplifier or receiver to the speaker, use 16-gauge or larger wire; if the distance is more than 50 feet long, use 14-gauge wire.

**WARNING:** Avoid routing the speaker wire near other electrical wires, and avoid nailing or stapling the speaker wire.

1. Separate the last 4 inches of the speaker wire conductors at each end of the wire.
2. Use a wire stripper to remove about ¼-inch of insulation from the end of each conductor.
3. Twist the ends of each conductor to secure loose strands.
4. Connect the positive wire to the red terminal on the back of the speaker by pressing down on the red positive (+) terminal's tab, inserting the end of the positive conductor, and releasing the tab.
5. Repeat this procedure to connect the negative conductor to the black negative (-) terminal.



## Room Setup Suggestions

To obtain the best possible sound quality from your E3b and E3c speakers, it is important to place the speakers where they will sound best in your listening room. Your room will influence the balance, imaging and overall sonic quality of the system, so you may want to experiment with speaker placement to determine which location offers the best overall sound for each speaker. As a general guide, use the room layout diagram and the following descriptions when setting up a home theater system. Some speakers shown in the diagram may not always be applicable to your individual system.

### Front Main Speakers

As a starting point, place your left and right speakers at least 15 inches from the wall and 7-feet apart from each other. The distance from the listening position to each speaker should be close to the distance that separates the two main speakers. Angling the speakers inward towards the listening position may give a more spacious and realistic sound stage.

### Center Channel Speaker

The center channel speaker should be placed in the center between both left and right main speakers. Often this positioning dictates placing the speaker either directly above or below a television monitor. The center channel speaker may be placed in a horizontal (lying down) or vertical (standing) position.

### Rear Surround Speakers

The speakers may be placed either above, behind or to the sides of the listening position. The listening position should be centered between the surround speakers. For best performance you may want to experiment with angling the surround speakers either towards or away from the listening position.

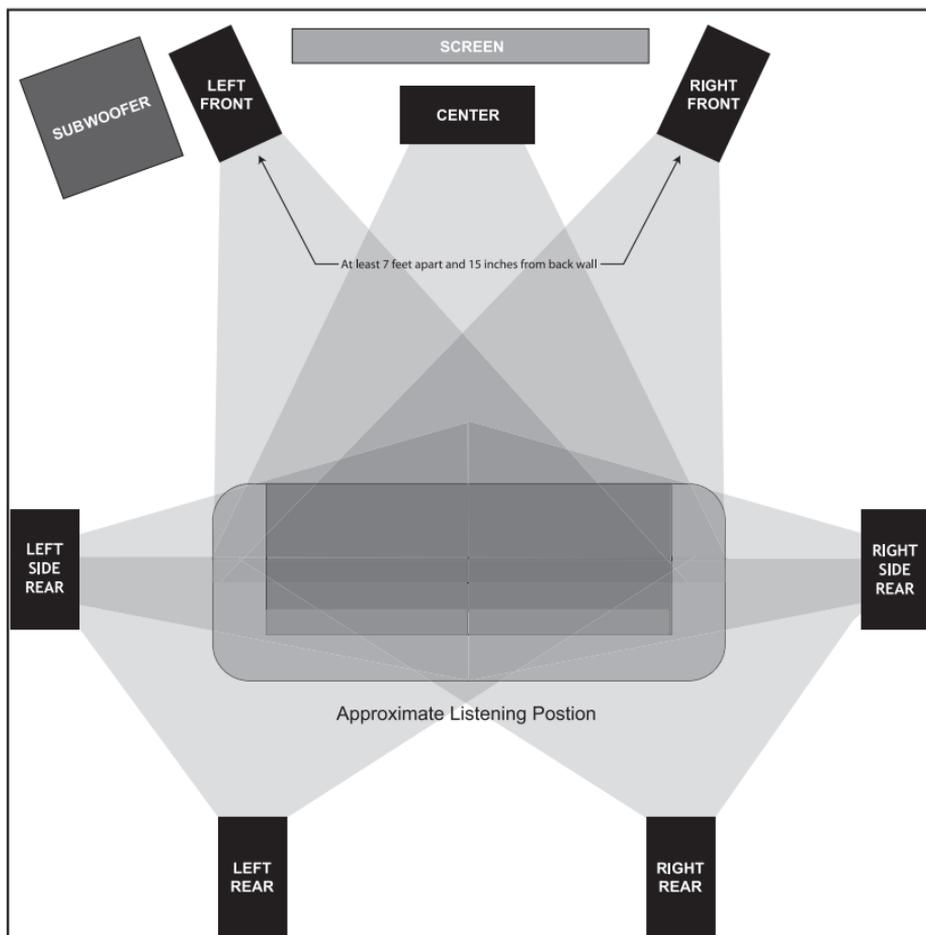
### Subwoofer

In order to obtain the best possible sound from your subwoofer, it is important to determine where the subwoofer will sound best in your listening room. Sound reflections from the floor, ceiling and side walls influence the balance, imaging and overall sonic quality at the listening position. Experiment with subwoofer placement to determine which location offers the best overall sound.

Placement of the subwoofer will largely determine quality, quantity and extension of the bass frequencies within your listening room. Bass frequencies are reinforced by close room boundaries. Placing the subwoofer in a corner will make the subwoofer sound louder and boost the very lowest frequencies.

Placing the subwoofer away from walls will provide the least reinforcement, making the bass sound subjectively thinner than if the woofer were closer to a wall. Good results can usually be obtained by placing a subwoofer along a wall 1-3 feet from a corner. Experiment with placement of the subwoofer and the sub-amplifier controls to achieve the proper bass balance.

## Room Setup Suggestions



**NOTE:** There are several different surround formats available. Dolby Pro-Logic, Pro-Logic II, Dolby Digital and DTS generally have a 5 speaker plus subwoofer requirement. Dolby Digital EX and DTS ES add a center rear speaker. Please consult your audio/video professional to determine which system is best for you and how many speakers you will require.

## Specifications

Model	E3b Mini-bookshelf	E3c Center Channel
<b>Frequency Response:</b>	80Hz – 20kHz	80Hz – 20kHz
<b>Sensitivity:</b>	82dB	84dB
<b>Recommended Power:</b>	10-100 Watts	10-120 Watts
<b>Woofers(s):</b>	(1) 3" (76mm) Aluminized Polygraphite	(2) 3" (76mm) Aluminized Polygraphite
<b>Tweeter(s):</b>	(1) 3/4" (19mm) Nano-silk Dome	(1) 3/4" (19mm) Nano-silk Dome
<b>Impedance:</b>	8 Ohms	8 Ohms
<b>Crossover Frequencies:</b>	3000 Hz	3000 Hz
<b>Crossover Slope:</b>	12dB/Octave	12dB/Octave
<b>Dimensions: (with grille)</b>	4-1/4" (108mm) W 6-3/4" (172mm) H 5-1/8" (130mm) D	10-3/4" (273mm) W 4-1/4" (108mm) H 6" (152mm) D
<b>Grille:</b>	Black Cloth	Black Cloth
<b>Cabinet:</b>	MDF/Satin Black Sand or White	MDF/Satin Black Sand or White
<b>Weight:</b>	3.25 lbs. (1.47 Kg)	5.90 lbs. (2.68 Kg)

## Troubleshooting—Speakers

Situation:	Probable Cause:	Solution:
No sound from speakers.	Speaker wire not connected.	Make sure wire is connected at both the speaker and the amplifier observing proper polarity.
No sound from one speaker.	Speaker selector on amplifier is not on.  Balance control on receiver or pre-amp is not centered.  Speaker wire not securely connected.	Activate proper selector on amplifier.  Place balance control in the center.  Check all connections at amplifier and speakers.
Very little bass and/or imaging.	Speakers are wired out of phase.	Check entire system for proper polarity and make adjustments as necessary.

## Warranty

Engineered Music Products "EMP Tek" warrants the E3 Series speakers (the "Product") to be free from original manufacturing defects in materials and workmanship for five (5) years, and subwoofer amplifiers one (1) year from the original date of purchase from an authorized EMP Tek dealer. This warranty extends only to the original consumer purchaser. EMP Tek does not warrant goods used in industrial applications. This warranty does not cover any expenses incurred in any removal or re-installation of the product.

If the product should prove defective within the warranty period, contact EMP Tek for a return authorization number prior to returning the product. Once the return authorization number has been obtained ship the product back to EMP Tek, along with the original sales invoice or other proof of purchase, which establishes eligibility for warranty service and the return authorization number clearly marked of the outside of the package, see [www.emptek.com](http://www.emptek.com) for detailed information on returns. EMP Tek will, at its option, replace or repair the product free of charge and return the product by prepaid delivery. This warranty does not apply to any product which has been damaged, misused, altered, neglected or repaired by anyone other than an EMP Tek authorized service facility.

Any implied warranties including fitness for use and merchantability are limited in duration to the period of the express warranties set forth above, and no person is authorized to assume for EMP Tek any other liability in connection with the sale of the product. EMP Tek expressly disclaims liability for any incidental and consequential damages caused by the product or the result of failure of this product. The remedies provided under this warranty are exclusive and in lieu of all others.

This warranty gives specific legal rights. In addition, there may be other legal rights arising from the sale of the product, which vary from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply in some areas.







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