

BOOKSHELF SPEAKERS

Model **E41-B**
BOOKSHELF SPEAKERS



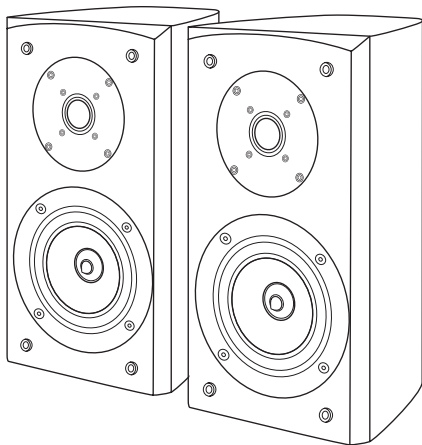
OWNER'S MANUAL

Introduction

Congratulations on your purchase of E41-B bookshelf speakers! Your speakers are the result of many years of research and development dedicated to producing high quality products for home audio and audio/video systems.

This manual contains features, setup recommendations and specifications for the E41-B bookshelf speakers. It is recommended 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.

E41-B Bookshelf Speakers



Break-in Period

Allow several hours of listening time to adequately break-in the E41-B bookshelf 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 damp soft cloth. To clean dust from the grille cloth, use a vacuum with a brush attachment.

Features

The E41-B bookshelf speaker is the perfect speaker for delivering wide-range performance with outstanding detail and accuracy. This speaker features beryllium cone woofers and midrange drivers. The beryllium cone material combines stiffness, low mass and self damping properties in a manner that allows virtually uncolored presentation of program material. A powerful magnet, extended voice coil and bumped back plate give the bass/midrange drivers high excursion capability. This ensures accurate dynamic reproduction. The 4-inch beryllium cone woofer provides excellent bass and mid-range resolution, while the 1-inch silk dome tweeter effortlessly reproduces crystal clear high frequencies. This tweeter uses liquid cooling to allow greater power handling. To protect the tweeter against being over driven, a polyswitch (a current limiting device) is incorporated in the crossover network.

An extensive crossover network is featured with each E41-B bookshelf speaker. 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. Large 5-way binding posts ensure a good, solid electrical connection to these crossover networks.

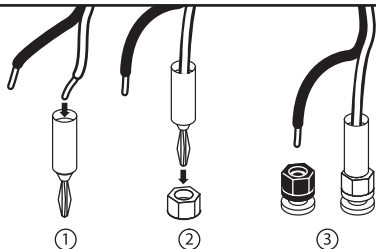
The E41-B bookshelf speakers' cabinets are constructed of ½-inch medium density fiberboard because of its inert properties, thereby minimizing sound coloration. The front baffles are double layered to 1-inch thickness helping to prevent excess acoustic radiation from the cabinet.

Attaching Speaker Wires

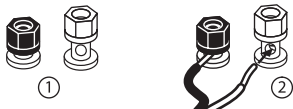
If using a banana jack, attach the matching positive or negative wire and push directly into binding post top hole.

If not using a banana jack, simply loosen the binding nut to allow the hole in the side of the terminal to become exposed. Strip ¼-inch of the insulation from the end of the speaker wire and insert the exposed wire end into the now exposed hole in the side of the terminal. Tighten the binding nut by turning the nut clockwise until the speaker wire is secured. Repeat for the other speaker wire(s) as necessary.

Using a Banana Jack



Without Banana Jack



Room Setup Suggestions

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

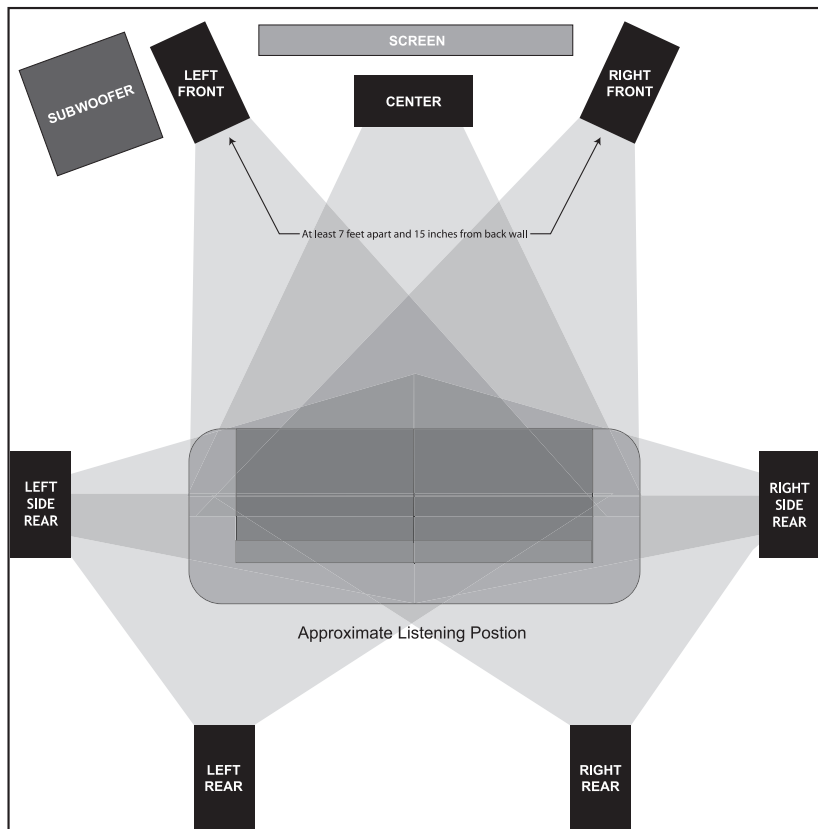
In order to obtain the best possible sound from your subwoofer, it is important to determine where the subwoofer will sound best in your listening room. Sound reflections from the floor, ceiling and side walls influence the balance, imaging and overall sonic quality at the listening position. Experiment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

IMPORTANT NOTICE REGARDING BASS MANAGEMENT: It is important the signal being sent to the subwoofer be a non-boosted or “flat” signal. To be sure of this, check the settings on your receiver or processor to make sure any “bass boost”, “super bass” or “loudness” is set to Off. In most cases a home theater receiver or processor will determine the crossover frequency through bass management settings. In this configuration, connect the receiver or processor to the Line Level Input. Your subwoofer will now reproduce the bass frequencies the way they were originally recorded. Use the subwoofer level control and the individual bass management control within the receiver or processor to adjust the subwoofers’ volume if necessary. Once set, the volume controls should not need to be altered as the subwoofers’ volume will track with the master volume control of your receiver or processor.



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. Dolby TrueHD and DTS Master Audio available only on Blu-ray disc, generally have a 7.1 requirement. Please consult your audio/video professional to determine which system is best for you and how many speakers you will require.

Specifications

Model	E41-B
System Type:	Bookshelf
Frequency Response:	70Hz-20kHz (± 3 dB)
Sensitivity:	86dB (2.83V @ 1 Meter)
Recommended Power:	30-100 Watts
Drive Units:	(1) 4" (102mm) Beryllium Cone Woofer (1) 1" (25mm) Silk Dome Tweeter
Crossover Frequency:	3,000 Hz
Crossover Slope:	12dB/Octave
Impedance:	8 Ohms
Cabinet Material:	Medium Density Fiberboard (MDF)
Cabinet Finish:	High-gloss Black Ash
Grille:	Black Cloth
Dimensions:	6-5/8" W x 11-5/8" H x 8-3/4" D (168mm W x 295mm H x 222mm D)
Weight:	6 lbs. (2.72 kg)
Warranty:	5 Years

Troubleshooting

Situation:	Probable Cause:	Solution:
No sound from speakers.	Speaker wire not connected. Speaker selector on amplifier is not on.	Make sure wire is connected at both the speaker and the amplifier observing proper polarity. Activate proper selector on amplifier.
No sound from one speaker.	Balance control on receiver or pre-amp is not centered. Speaker wire not securely connected.	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 E41-B bookshelf speakers (the "Product") to be free from original manufacturing defects in materials and workmanship for five (5) years 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 on the outside of the package, see 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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