

# 4-1/2" 2-WAY BOOKSHELF SPEAKER PAIR WITH AMT TWEETER

Model: B452-AIR User Manual



Congratulations on your purchase of the Dayton Audio<sup>®</sup> B452-AIR speakers. These subcompact-sized speakers use groundbreaking Air Motion Transformer (AMT) tweeter technology to reproduce clear, natural high frequency sound that rivals many more expensive speakers. Please read on to discover how to get the most from your new speakers.

# 1) Parts Inventory

The B452-AIR speaker package includes the following items:

- 1 pair of Dayton Audio B452-AIR speakers
- 1 pair of 2-conductor red/black speaker cables

# 2) Installation Tools

No tools are required for installation of the B452-AIR speakers. Additional tools and hardware may be required for wall mounting.

## 3) Speaker Placement

Because of their well-behaved off-axis response and excellent dispersion, your new Dayton Audio speakers are less critical to position than most loud-speakers. Often, simply placing them where they best fit into the decorating scheme is all that is necessary for exceptional performance. The B452-AIR speakers feature a wall hanger on the rear of the enclosure to facilitate safe wall mounting.

**CAUTION:** The B452-AIR speakers are compact in size, but substantial in weight. When wall-mounting or shelf-mounting the B452-AIR speakers, be sure that the wall hanger or shelf is anchored to the structure of the building via a stud or drywall insert, to prevent falling of the loudspeakers and potential injury.

If you are inclined to go through a more rigorous positioning exercise, the following paragraphs will help you achieve all the performance that your system is capable of.

Carefully select a few recordings. Choose recordings made with simple arrangements and strong vocals by a single performer. Physically small sound sources localize much more precisely. Placement of horns, strings, vocals, and drums will snap into focus when the loudspeakers are optimally positioned.

Start with the speakers directly in front of your primary listening position. Avoid hard vertical edges within 3 or 4 feet of either side of the cabinet. Position the cabinets about 1-2 feet out from the wall. Listen to one of the selected recordings paying close attention to the positions of the instruments and vocalist. Move the speakers a few inches at a time, returning to the listening position to evaluate the results. Once placement is optimized, the vocalist will

be firmly positioned in front of the instruments and the instruments will seem to be between or behind the loudspeakers. If possible, position your speakers so that when you are seated in the primary listening position your ears are 10-12 feet from the tweeter. Viewed from your seat, the angle between the speakers should be 30 to 60 degrees.

Pay special attention to the bass. The relation between bass response and room position is critical. Adjust the position of the speakers closer to or further away from walls so that the bass levels are in proportion with the rest of the musical spectrum.

Loudspeaker positioning can be time-consuming, but the rewards justify the effort.

# 4) Speaker Connection

Use the supplied speaker wire or other good quality wire for the connection between your Dayton Audio loudspeakers and the amplifier. For longer runs, heavier wire should be used. For proper performance the speakers must be "phased" correctly. To insure proper phasing, connect the red speaker terminals to the red amplifier terminals and the black speaker terminals to the black amplifier terminals. All two-conductor wire is marked in some way to help you do this. One side will be marked with a colored stripe, a raised rib, or a different colored conductor. Use the marked side for the "red" connections.

# 5) Caring For Your Speakers

Clean your speakers by wiping with a damp, lint-free cloth. The finish of your speakers can be maintained and enhanced by periodic use of a surface protection such as "ArmorAll". The grills may be vacuumed, gently tapped, or brushed to remove dust and debris.

**POWER RATING NOTE:** Almost any speaker can be used successfully with almost any amplifier. Conversely, almost any speaker can be damaged by almost any amplifier-despite either unit's power rating. The published power rating is accurate only if the volume level is never set above the point of audible distortion. Distortion is an indication that the amplifier or loudspeaker is operating beyond its design limits, and damage may occur – often within seconds. If you hear distortion, immediately reduce the volume. The B452-AIR is designed to be used with stereo equipment rated from 5 to 60 watts and from 4 to 8 ohms.

Dayton Audio loudspeakers are designed to reproduce music and speech in a home environment at moderate volume levels. When used within their limits Dayton Audio loudspeakers will provide many years of trouble free performance.

## SPECIFICATIONS:

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Model Number:	B452-AIR
Description:	2-Way Bookshelf Speaker Pair
Woofer:	4-1/2" polypropylene cone with 4-layer coil
Tweeter:	Mini AMT type with pleated Kapton diaphragm
Finish:	Black ebony pica vinyl on particle board
Power Handling:	30W RMS/60W max
Impedance:	6 ohms
Response:	85 Hz to 20,000 Hz
Sensitivity:	84 dB 1W/1m
Crossover:	First order high-pass
Terminals:	Quick-connect spring-loaded terminals
Other:	Keyhole mounting bracket
Dimensions:	9.5" H x 5.5" W x 5.7" D
	Depth includes grill*

\* Grill is removable, acoustically-transparent cloth

**WARNING:** This product may contain a chemical or chemical[s] known to the State of California to cause cancer or birth defects or other reproductive harm.

### WARRANTY COVERAGE

Dayton Audio products are warranted to be free of all defects in material and workmanship for 5 YEARS from the date of purchase from an authorized Dayton Audio dealer. This warranty and all rights provided are limited to the original owner and are non-transferable. Dayton Audio's responsibility is limited to replacement or repair as set forth in this warranty statement.

Should a product require warranty service during this period, Dayton Audio will repair or replace without charge, any part or product proving defective in material or workmanship. All warranty repairs and service must be performed by an authorized Dayton Audio technician or service facility. The use of non-authorized repair services renders this warranty null and void, and any charges relating to non-authorized repair are the responsibility of the product owner.

All expenses related to replacing or repairing a defective part or product under this warranty shall be assumed by Dayton Audio. Dayton Audio reserves the right to replace defective product with a new or factory reconditioned unit.

### WARRANTY EXCLUSIONS

 This warranty does not cover product failure or damage resulting from misuse, abuse, neglect, accidents, alterations, standard environmental deterioration, natural disasters, or improper use and/or installation.

 This warranty does not cover cosmetic damage due to misuse or neglect. This includes paint damage, scratches, cracks or other superficial marks related to improper use.

3. Failures arising from attempted servicing of a non-authorized Dayton Audio repair facility or technician are excluded from this warranty. LIMITATION OF DAMAGES

In no event shall Dayton Audio be liable for consequential damages for breach of this warranty including installation charges, excessive shipping expenses, property loss or other incidental loss. Some States do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to the buyer.

### HOW TO OBTAIN WARRANTY SERVICE

To obtain services under this warranty, the buyer shall contact Dayton Audio's authorized service provider, Parts Express, at 1-800-338-0531 x 780 to obtain a return authorization number (RA#).

The buyer must carefully pack the warranted product along with a copy of the original purchase receipt, the return authorization number (RA#), and a description to the repair facility listed below. Shipping for warranty service is dependent upon the return policy where the Dayton Audio product was purchased.

Parts Express

Attn: Dayton Audio Warranty Repairs RA# (please write your RA# here) 705 Pleasant Valley Drive

Springboro, Ohio 45066

## NOTICE TO BUYER

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



## daytonaudio.com

tel + 937.743.8248 Sprir info@daytonaudio.com USA



705 Pleasant Valley Dr. Springboro, OH 45066 USA