6-1/2" 2-WAY BOOKSHELF SPEAKER PAIR

Model: B652 User Manual
Thank you for choosing Dayton Audio®. Dayton Audio loudspeakers are designed to provide exceptional performance and maximum value. Please read on to discover how to get the most from your new speakers.

CONNECTING YOUR LOUDSPEAKERS

Use good quality wire for the connection between your Dayton Audio loudspeakers and the amplifier. For distances up to 10 feet, conventional “speaker wire” or lamp cord is acceptable. For longer runs, heavier wire should be used. For proper performance the speakers must have correct polarity. To insure proper polarity, 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.

ROOM PLACEMENT

Because of their well-behaved off-axis response and excellent dispersion, your new Dayton Audio speakers are less critical to position than most loudspeakers. Often, simply placing them where they best fit into the decorating scheme is all that is necessary for exceptional performance.

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 miking and strong vocals by a single performer. Avoid recordings with piano accompaniment unless you know that the recording microphones were at least 15-20 feet from the piano. The reason for this precaution is that the piano is a large instrument, and is often recorded with multiple microphones placed close to it. The notes arrive at the microphones from different directions and the speakers will reproduce the directional clues confusing the positioning process. Physically small sound sources localize much more precisely. Horns, strings, vocals, and drums snap into place with 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. During the design of most Dayton Audio speakers, performance is optimized for listener location 10-12 feet in front of the tweeter. 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. Tightly localized high and low pressure spots result from reflections off the room boundaries. Moving one or both of the loudspeakers just a few inches will rearrange thousands of hot and dead spots all over the room. The secret to proper positioning is to keep the worst of these spots from falling on the primary listening position. Position the speakers so that the bass levels are in proper perspective to the rest of the musical spectrum. Listen to several recordings so that you hear bass from a variety of instruments. The most common positioning error involves getting the bass level right for one note, but not for others.

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

CABINET CARE

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 or gently tapped or brushed to remove dust and debris.

POWER RATINGS

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 power recommendations that we publish are accurate only if our assumptions concerning the amplifier, the type of music, and the conditions of use are correct. Most importantly we assume that the volume never is set above the point of distortion. Distortion is an indication that the amplifier or loudspeaker is operating beyond its design limits. If you hear distortion, immediately reduce the volume. Damage can occur within seconds. Do not ignore distortion just because the volume control is not all the way up. A common misconception exists that amplifier power is proportional to the setting of the volume control with maximum setting necessary for full power output. This is rarely the case. Most amplifiers deliver full power when the volume control is set somewhere in the middle of its range. Use of loudness, bass boost, treble boost, or an equalizer can produce full output at even lower knob settings. Distortion is the only clue that damage is imminent.

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:

Model: B652
Description: 6-1/2" 2-Way Bookshelf Speaker Pair
Woofers: 6-1/2" polypropylene cone
Tweeter: 5/8" polycarbonate with ferrofluid
Finish: Black ebony pica vinyl on particle board
Power Handling: 40W RMS/75W max
Impedance: 6 ohms
Response: 70 Hz to 20,000 Hz
Sensitivity: 87 dB 1W/1m
Crossover: First order high-pass
Terminals: Quick connect push terminal
Other: Keyhole mounting bracket
Dimensions: 11-13/16" H x 7-1/16" W x 6-7/16" D*
*Depth includes grill

Note: Grill is removable, non-see-through 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
1. 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.
2. 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.