

Onkyo D-412EX

ONKYO D-412EX Speaker System Instruction Manual

Model: D-412EX

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1. INTRODUCTION

This manual provides essential information for the safe and efficient use of your ONKYO D-412EX Speaker System. Please read it thoroughly before use and retain it for future reference.

2. KEY FEATURES

- **A-Silk OMF Diaphragm:** Features a newly developed A-Silk OMF diaphragm, combining the natural characteristics of silk with the strength and flexibility of aramid fiber hybrid molding.
- **Advanced Ring-Type Tweeter:** Utilizes a ring-type diaphragm and a balanced drive structure with a voice coil positioned between the outer and inner edges of the diaphragm. This design ensures accurate ultra-wideband reproduction up to 100kHz, faithfully covering frequencies up to 20kHz without relying on split vibrations common in conventional dome tweeters.
- **Bass Reflex Technology:** Incorporates bass reflex technology to enable high-quality bass enhancement within a compact cabinet size. This design releases air vibrations generated inside the cabinet to the exterior through a duct.
- **Isolated Mount Method:** Employs an isolated mount method to separate the network circuits for the woofer and tweeter units, preventing signal interference between them.
- **Gold-Plated Machined Brass Terminals:** Equipped with gold-plated machined brass speaker terminals, offering superior conductivity and preventing signal transmission loss and degradation over time.

3. SETUP

3.1 Unpacking

Carefully remove the speakers from their packaging. Ensure all components are present and undamaged. Retain the packaging for future transport or storage.

3.2 Placement

For optimal sound performance, place the speakers on a stable, level surface. Ensure there is adequate space around each speaker for proper ventilation and sound dispersion. Avoid placing speakers directly against walls or in corners, as this can affect bass response.



Figure 1: ONKYO D-412EX Speaker System. This image shows the two black bookshelf speakers with their grilles on, positioned on a wooden surface.

3.3 Connecting the Speakers

Connect the speakers to your amplifier or receiver using high-quality speaker cables. Observe correct polarity: connect the positive (+) terminal on the speaker to the positive (+) terminal on the amplifier, and the negative (-) terminal on the speaker to the negative (-) terminal on the amplifier. The D-412EX features gold-plated machined brass terminals for secure and high-fidelity connections.

1. Ensure your amplifier/receiver is turned off before making any connections.
2. Unscrew the terminal caps on the back of each speaker and your amplifier.
3. Insert the bare wire ends of the speaker cable into the corresponding terminals.
4. Tighten the terminal caps to secure the wires. Ensure no stray wire strands are touching other terminals, which could cause a short circuit.

4. OPERATION

4.1 Initial Power On

After connecting the speakers, turn on your amplifier/receiver. Start with the volume at its lowest setting and gradually increase it to a comfortable listening level.

4.2 Listening Tips

- Allow a "break-in" period for new speakers. The sound quality may improve after several hours of use.
- Experiment with speaker placement to find the best stereo imaging and bass response for your room.
- Avoid excessively high volume levels for prolonged periods to prevent damage to the speakers and your hearing.

5. MAINTENANCE

- **Cleaning:** Use a soft, dry cloth to wipe the speaker cabinets. Do not use liquid cleaners or abrasive materials, as they may damage the finish.
- **Grilles:** The speaker grilles can be carefully removed for cleaning or if you prefer the aesthetic without them. Handle them gently to avoid damage.
- **Environment:** Keep speakers away from direct sunlight, heat sources, and excessive moisture.

6. TROUBLESHOOTING

| Problem | Possible Cause | Solution |
|------------------------|---|---|
| No sound from speakers | Amplifier/receiver not powered on. Speaker cables incorrectly connected or loose. Incorrect input selected on amplifier/receiver. | Ensure amplifier/receiver is on. Check all speaker cable connections for correct polarity and tightness. Select the correct audio input source. |
| Distorted sound | Volume too high. Poor quality audio source. Damaged speaker cable. | Reduce volume. Try a different audio source. Inspect and replace damaged cables. |
| Uneven sound balance | Speaker placement issues. Balance settings on amplifier/receiver. | Adjust speaker positions for symmetry. Check and adjust balance controls on your amplifier/receiver. |

If the problem persists, consult a qualified service technician.

7. SPECIFICATIONS

| Feature | Detail |
|--------------------------------|--------------------------------|
| Brand | Onkyo |
| Model Number | D-412EX |
| Speaker Type | Bookshelf |
| Mounting Type | Tabletop Mount |
| Recommended Use | For Music Players |
| Color | Black |
| Impedance | 4 Ohms |
| Product Dimensions (D x W x H) | 32.3 x 21.4 x 34.7 cm |
| Product Weight | 50.09 pounds (approx. 22.7 kg) |

8. WARRANTY INFORMATION

For detailed warranty information, please refer to the warranty card included with your product or visit the official ONKYO website.

9. CUSTOMER SUPPORT

If you require further assistance or have questions not covered in this manual, please contact ONKYO customer support. Contact details can be found on the official ONKYO website or in your product documentation.