

## Hifonics HFX12D4

# Hifonics HFX12D4 12-Inch Dual 4 Ohm Subwoofer Instruction Manual

Model: HFX12D4 | Brand: Hifonics

## INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of your Hifonics HFX12D4 12-inch Dual 4 Ohm Subwoofer. Please read this manual thoroughly before use to ensure optimal performance and longevity of your product.



Image: Front and rear view of the Hifonics HFX12D4 subwoofer, showcasing its design and terminal layout.

## SETUP AND WIRING

Proper wiring is crucial for the performance and safety of your subwoofer. The HFX12D4 features dual 4-ohm voice coils, allowing for various wiring configurations. This section details how to wire the subwoofer for a 2-ohm parallel impedance.

### Wiring Demonstration Video

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Video: An official Hifonics demonstration showing the proper wiring steps for setting up the HFX12D4 dual 4-ohm subwoofer in parallel to achieve a 2-ohm impedance.

### Step-by-Step Wiring Instructions (2-Ohm Parallel)

- 1. Identify Terminals:** The HFX12D4 has two sets of terminals. Each set includes a positive terminal (larger spade connector) and a negative terminal (smaller spade connector).



Image: Close-up view of the subwoofer's dual terminals, showing one positive (red wire) and one negative (black wire) connection per voice coil.

2. **Prepare Jumper Wires:** You will need two short jumper wires, each with spade connectors on both ends. One jumper wire should connect the positive terminals, and the other should connect the negative terminals.
3. **Connect Positive Terminals:** Take one jumper wire (e.g., red) and connect one end to the positive terminal of the first voice coil. Connect the other end of this jumper wire to the positive terminal of the second voice coil.



Image: The HFX12D4 subwoofer with a red jumper wire connecting the two positive terminals, illustrating a parallel connection for the positive side.

4. **Connect Negative Terminals:** Take the second jumper wire (e.g., black) and connect one end to the negative terminal of the first voice coil. Connect the other end of this jumper wire to the negative terminal of the second voice coil.



Image: The HFX12D4 subwoofer with a black jumper wire connecting the two negative terminals, illustrating a parallel connection for the negative side.

5. **Connect to Amplifier:** Now, connect the main speaker wire from your amplifier to one of the positive terminals (where the red jumper is connected) and one of the negative terminals (where the black jumper is connected). This completes the 2-ohm parallel wiring.

After completing these connections, your HFX12D4 subwoofer is ready to be connected to your amplifier. Always ensure your amplifier is stable at a 2-ohm load before powering on.

## OPERATING INSTRUCTIONS

Once installed and wired correctly, follow these general guidelines for operating your Hifonics HFX12D4 subwoofer:

- **Power On/Off Sequence:** Always turn on your head unit or audio source first, then your amplifier. When powering off, turn off your amplifier first, then your head unit. This prevents "thump" noises that can damage speakers.
- **Gain Setting:** Set the amplifier gain correctly. Do not use the gain control as a volume knob. It should be set to match the output voltage of your head unit. Incorrect gain settings can lead to distortion and damage.
- **Crossover Settings:** Utilize the low-pass filter (LPF) on your amplifier to send only low frequencies to the subwoofer. A typical LPF setting for a 12-inch subwoofer is between 80Hz and 120Hz.
- **Subsonic Filter:** If your amplifier has a subsonic filter, enable it and set it slightly below your enclosure's tuning frequency to protect the subwoofer from playing frequencies too low for its design.
- **Volume Control:** Adjust the volume gradually. Avoid prolonged listening at maximum volume levels, especially if distortion is audible.

## MAINTENANCE

To ensure the longevity and optimal performance of your Hifonics HFX12D4 subwoofer, follow these maintenance tips:

- **Regular Cleaning:** Keep the subwoofer cone and surround free from dust and debris. Use a soft, dry cloth to gently wipe surfaces. Avoid using harsh chemicals or excessive moisture.
- **Inspect Wiring:** Periodically check all wiring connections for tightness and corrosion. Loose connections can lead to signal loss or overheating.
- **Environmental Protection:** Protect the subwoofer from extreme temperatures, direct sunlight, and moisture. If installed in a vehicle, ensure it is properly secured to prevent movement and damage.
- **Avoid Overpowering:** Do not exceed the subwoofer's RMS power rating (400 Watts) or peak power rating (800 Watts). Overpowering can cause voice coil damage.

## TROUBLESHOOTING

If you encounter issues with your Hifonics HFX12D4 subwoofer, refer to the following common troubleshooting steps:

Problem	Possible Cause	Solution
No Sound from Subwoofer	<ul style="list-style-type: none"><li>• Loose or incorrect wiring</li><li>• Amplifier not powered on or in protect mode</li><li>• Head unit settings incorrect (e.g., subwoofer output off)</li><li>• Damaged subwoofer or amplifier</li></ul>	<ul style="list-style-type: none"><li>• Check all wiring connections for tightness and correct polarity.</li><li>• Verify amplifier power and ground connections; check fuses.</li><li>• Ensure subwoofer output is enabled and volume is up on head unit.</li><li>• Test components individually if possible.</li></ul>
Distorted Sound	<ul style="list-style-type: none"><li>• Amplifier gain set too high</li><li>• Overpowering the subwoofer</li><li>• Incorrect crossover settings</li><li>• Damaged voice coil</li></ul>	<ul style="list-style-type: none"><li>• Reduce amplifier gain until distortion disappears.</li><li>• Ensure RMS power matches amplifier output.</li><li>• Adjust LPF to appropriate frequency (e.g., 80-120Hz).</li><li>• Inspect subwoofer for physical damage.</li></ul>

Problem	Possible Cause	Solution
Weak or No Bass	<ul style="list-style-type: none"><li>Phase issue</li><li>Low-pass filter set too low</li><li>Insufficient amplifier power</li></ul>	<ul style="list-style-type: none"><li>Check phase setting on amplifier or head unit.</li><li>Increase LPF frequency slightly.</li><li>Ensure amplifier provides adequate power for the subwoofer.</li></ul>

If these steps do not resolve the issue, consult a professional car audio installer or contact Hifonics customer support.

## SPECIFICATIONS

The following are the technical specifications for the Hifonics HFX12D4 12-inch Dual 4 Ohm Subwoofer:

Feature	Detail
Model Name	Woofer 400W
Speaker Type	Woofer
Special Feature	Bass Boost
Subwoofer Diameter	12 Inches
Peak Power	800 Watts
RMS Power	400 Watts
Impedance	Dual 4 Ohms
Voice Coil	2" Vented Aluminum Former
Subwoofer Sensitivity (1W/1M)	86 dB
Product Dimensions (D x W x H)	5.63"D x 12"W x 12"H
Item Weight	8.2 Pounds
Surround Material	Pressure Treated Foam
Spider Material	Poly Cotton
Connectivity Technology	Wired
Manufacturer	Hifonics
Date First Available	March 28, 2023

## WARRANTY INFORMATION

This Hifonics HFX12D4 subwoofer is covered by a manufacturer's warranty. For specific details regarding warranty coverage, duration, and claims procedures, please refer to the warranty card included with your product or visit the official Hifonics website. Keep your proof of purchase for warranty validation.

## CUSTOMER SUPPORT

For further assistance, technical support, or inquiries not covered in this manual, please contact Hifonics customer support. You can typically find contact information on the official Hifonics website or through your product retailer.

**Online Resources:** [Visit Hifonics Official Website](#)

Related Documents - HFX12D4

	<p><a href="#">Hifonics ZEUS ZW12D4 Car Audio Subwoofer: Installation Guide &amp; Specifications</a></p> <p>Detailed installation guide and technical specifications for the Hifonics ZEUS Series ZW12D4 car audio subwoofer. Includes enclosure recommendations, build materials, wiring diagrams, and a glossary of terms.</p>
	<p><a href="#">Hifonics TITAN TS Series Bassreflex Subwoofer Systems - User Guide</a></p> <p>This guide provides important safety information, power ratings, dimensions, and connection details for the Hifonics TITAN TS Series TS250R and TS300R Bassreflex Subwoofer Systems. Learn about proper installation, amplifier matching, and disposal guidelines.</p>
	<p><a href="#">HiFonics Zeus ZSPL12D2 High Power SPL Subwoofer: User Manual &amp; Specifications</a></p> <p>Detailed user manual and specifications for the HiFonics Zeus ZSPL12D2 High Power SPL Subwoofer, including safety warnings, installation guidelines, technical data, enclosure recommendations, and wiring diagrams.</p>
	<p><a href="#">Hifonics Titan TS Series Subwoofer Systems Installation and Operation Guide</a></p> <p>This guide provides important safety information, installation instructions, and power rating recommendations for the Hifonics Titan TS Series Bassreflex Subwoofer Systems, including the TS250R and TS300R models.</p>
	<p><a href="#">HIFONICS ZRX111P Zeus Series Subwoofer System User Manual</a></p> <p>User manual for the HIFONICS ZRX111P Zeus Series subwoofer system. Provides safety instructions, power rating details, technical specifications, dimensions, and connection guides for mono and 2-channel amplifiers.</p>



## [HIFONICS ZRX111A Zeus Series Active Subwoofer System User Manual](#)

Comprehensive user and installation manual for the HIFONICS ZRX111A Zeus Series Active Subwoofer System, covering specifications, installation, connections, controls, and troubleshooting.