**Manuals+**
Q & A | Deep Search | Upload



**Gikfun EK1949**

# Gikfun 2" 4Ohm 5W Full Range Audio Speaker Stereo Woofer (Model EK1949) Instruction Manual

Model: EK1949

## 1. Introduction

This manual provides essential information for the proper setup, operation, and maintenance of your Gikfun 2-inch, 4 Ohm, 5W Full Range Audio Speaker Stereo Woofer. Designed for various audio projects, including Arduino applications and home audio-visual equipment, these speakers offer clear sound reproduction for your DIY needs. Please read this manual thoroughly before use to ensure optimal performance and longevity of your product.

Image 1.1: Gikfun 2-inch 4 Ohm 5W Full Range Audio Speaker. This image shows a single speaker unit, highlighting its compact size and design suitable for various audio projects.

## 2. Product Features

- **Compact Design:** 2-inch full range audio speaker, ideal for space-constrained projects.
- **Standard Impedance:** Rated at 4 Ohm, compatible with a wide range of audio amplifiers.
- **Power Handling:** Rated power of 5W, suitable for various low-power audio applications.
- **Versatile Application:** Works well for home audio-visual equipment, HiFi speakers, Amazon Echo replacements, radio, interphone, multimedia speakers, and DIY hobby soldering projects.
- **Sound Quality:** Features a classic R ring design and pure copper wire coil for clear, bright, and distinct sound layers.
- **Durability:** Constructed with a cotton blend shrapnel for excellent rigidity, strong rebound, and fatigue resistance, ensuring a long service life.

Image 2.1: Detailed view of the speaker's internal components. This image illustrates the classic R ring design, pure copper wire coil, and cotton blend shrapnel, which contribute to the speaker's sound quality and durability.

## 3. Specifications

| Specification | Value |
|---|---|
| Model Name | EK1949 |
| Speaker Type | Woofer |
| Rated Impedance | 4 Ohm |
| Rated Power | 5W |
| Resonance Frequency | 190Hz ±20% |
| Output Sound Pressure Level | 78dB ±3dB |

| Specification | Value |
|---|---|
| Insulation Resistance | 10MΩ |
| Speaker Size | 2 Inches (approx. 5.08 cm) |
| Mounting Type | Flush Mount |
| Number of Items | 2 (per pack) |
| Item Weight | 6.7 ounces (approx. 190g) |
| Package Dimensions | 4.41 x 2.4 x 1.89 inches |

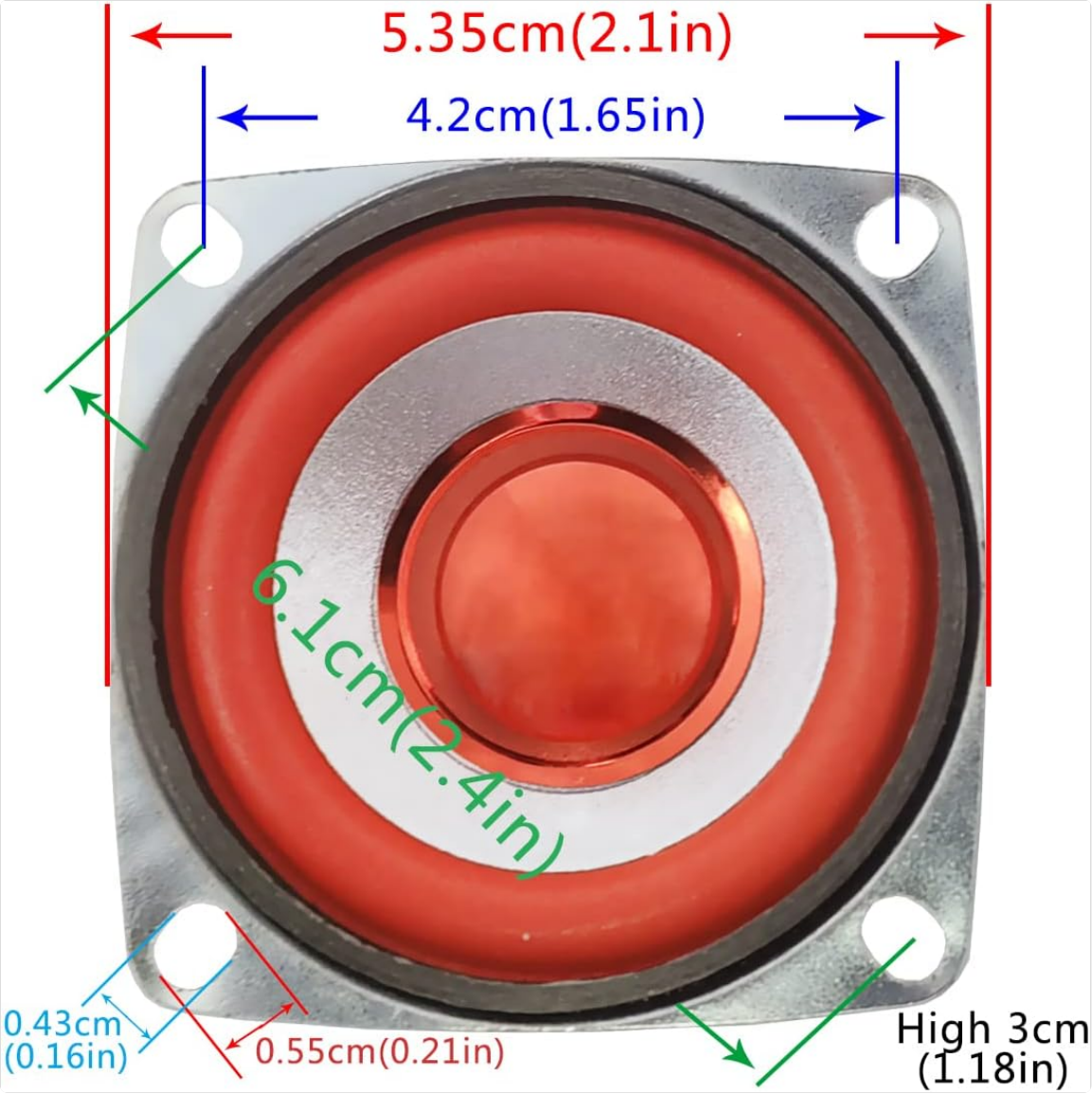


Image 3.1: Dimensional drawing of the Gikfun speaker. This image provides precise measurements in both centimeters and inches, crucial for integration into custom enclosures or projects.

## 4. What's in the Box

Your Gikfun 2" 4Ohm 5W Full Range Audio Speaker package includes the following items:

- 2 x HW430-H Speakers

## 5. Setup and Installation

These speakers are designed for integration into various audio projects. Proper connection to an amplifier is crucial for optimal performance and to prevent damage.

### 5.1 Basic Wiring

1. Identify the positive (+) and negative (-) terminals on the back of each speaker.
2. Connect the speaker terminals to a compatible audio amplifier. Ensure the amplifier's output impedance matches the speaker's 4 Ohm impedance.
3. For stereo setups, connect each speaker to its respective channel on the amplifier.
4. Secure all connections to prevent shorts or loose contacts.

### 5.2 Mounting

The speakers feature a flush mount design. Ensure the mounting surface is stable and provides adequate clearance for the speaker's depth. Use appropriate screws or fasteners through the mounting holes on the speaker frame.

Image 5.1: Example of the Gikfun speaker mounted within a clear acrylic enclosure, demonstrating a typical DIY application. This setup shows the speaker connected to an amplifier board.

Image 5.2: Another example of Gikfun speakers integrated into a DIY audio project, showcasing their versatility and ease of incorporation into custom builds.

### 5.3 Video Demonstration: DIY Speaker Setup

Your browser does not support the video tag.

Video 5.1: This video demonstrates how to make excellent DIY speakers using Gikfun components, providing visual guidance for assembly and connection.

## 6. Operating Instructions

Once properly installed and connected to an amplifier, operating your Gikfun speakers is straightforward.

1. Ensure your amplifier is connected to a power source and an audio input (e.g., smartphone, tablet, computer).
2. Turn on your audio amplifier.
3. Play audio from your source device. Adjust the volume on your amplifier or source device to your desired listening level.
4. Avoid playing audio at excessively high volumes for prolonged periods to prevent speaker damage.

### 6.1 Video Demonstration: Speaker in Operation

Your browser does not support the video tag.

Video 6.1: This video showcases the Gikfun 4 Ohm 5W Full Range Audio Speaker in a DIY setup, demonstrating its sound output and functionality.

## 7. Maintenance

To ensure the longevity and optimal performance of your Gikfun speakers, follow these simple maintenance guidelines:

- **Cleaning:** Gently wipe the speaker's exterior with a soft, dry cloth. Avoid using harsh chemicals or abrasive materials, which can damage the speaker cone or frame.
- **Environment:** Keep the speakers in a dry environment, away from direct sunlight, extreme temperatures, and high humidity.
- **Protection:** Avoid exposing the speaker cone to sharp objects or excessive pressure, which can cause tears or dents.
- **Connections:** Periodically check all wiring connections to ensure they are secure and free from corrosion.

## 8. Troubleshooting

If you encounter issues with your Gikfun speakers, refer to the following common troubleshooting steps:

### 8.1 No Sound Output

- **Check Connections:** Ensure all speaker wires are securely connected to both the speaker terminals and the amplifier output. Verify correct polarity (+ to + and - to -).
- **Power Supply:** Confirm that your amplifier is powered on and receiving adequate power.
- **Audio Source:** Check if the audio source (e.g., phone, computer) is playing sound and its volume is turned up. Test with a different audio source if possible.

- **Amplifier Functionality:** Verify that your amplifier is working correctly by testing it with another known-good speaker, if available.

### 8.2 Distorted Sound

- **Volume Level:** Reduce the volume on both the audio source and the amplifier. Excessive volume can cause distortion.
- **Power Output:** Ensure your amplifier's power output does not exceed the speaker's rated power of 5W. Overpowering can lead to distortion and damage.
- **Loose Connections:** Check for any loose or frayed speaker wire connections.
- **Speaker Damage:** Inspect the speaker cone for any visible damage (tears, dents). A damaged cone can cause distorted sound.

### 8.3 Low Volume

- **Volume Settings:** Increase the volume on both your audio source and amplifier.
- **Impedance Mismatch:** While these speakers are 4 Ohm, ensure your amplifier is designed to drive 4 Ohm loads efficiently. An impedance mismatch can result in lower volume or reduced power output.
- **Audio Source Output:** Some audio sources have lower output levels. Consider using a pre-amplifier if necessary.

## 9. Warranty and Support

Gikfun products are designed for reliability and performance. For any issues or inquiries, please refer to the following information:

- **Return Policy:** This product is typically eligible for a 30-day refund or replacement policy from the date of purchase. Please refer to your retailer's specific return policy for details.
- **Technical Support:** For technical assistance, troubleshooting beyond this manual, or warranty claims, please contact the Gikfun_Official_Store directly through your purchase platform.

© 2026 Gikfun. All rights reserved.