

## JBL 8124

# JBL 8124 Full-Range In-Ceiling Loudspeaker Instruction Manual

Model: 8124 | Brand: JBL

## 1. INTRODUCTION

The JBL 8124 is a 4-inch, full-range, cost-effective loudspeaker designed for commercial applications. It delivers high-fidelity performance in an easy-to-install package. The high sensitivity drivers ensure maximum sound levels with minimal amplifier power. Featuring a contemporary grille design, 70V/100V taps, and an open-back design, the 8100 series is suitable for basic commercial sound systems or any application not requiring a backcan for installation.



Figure 1: Four JBL 8124 Full-Range In-Ceiling Loudspeakers.

### Key Features:

- Clear, High-Fidelity Performance
- High Sensitivity (93 dB, 1W, 1m) for Maximum Power Efficiency
- 6W Transformer for use with 70V / 100V Distributed Lines
- Dog-ears for easy Blind Mount Installations
- Open-back design for applications not requiring an in-ceiling backcan
- Includes Sculpted Grille

## 2. PRODUCT OVERVIEW AND COMPONENTS

The JBL 8124 loudspeaker consists of a 4-inch full-range driver, an integrated transformer for 70V/100V systems, mounting dog-ears, and a sculpted grille.



Figure 2: Front view of the JBL 8124 loudspeaker without its grille, revealing the 4-inch full-range driver.



Figure 3: The sculpted grille for the JBL 8124 loudspeaker, designed for aesthetic integration.



Figure 4: Internal view of the JBL 8124, highlighting the driver's magnet structure and the integrated transformer.

## 3. INSTALLATION

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The JBL 8124 is designed for easy in-ceiling installation using its integrated dog-ear mounting tabs. Ensure power is disconnected before beginning installation.

### 3.1 Mounting

- 1. Prepare the Ceiling Opening:** Cut a circular opening in the ceiling. The required cutout diameter is approximately 200 mm (7.9 inches). Refer to the specifications section for precise dimensions.
- 2. Insert the Loudspeaker:** Carefully insert the loudspeaker into the prepared opening.
- 3. Engage Mounting Tabs:** The integrated dog-ear mounting tabs will automatically pivot outwards as you tighten the mounting screws (typically located on the front baffle). Tighten these screws until the loudspeaker is securely fastened to the ceiling. Do not overtighten.



Figure 5: Side view illustrating the dog-ear mounting tabs in their extended position, ready to secure the speaker to the ceiling.

### 3.2 Wiring (70V/100V Taps)

The 8124 features a multi-tap transformer for use in 70V or 100V distributed audio systems. The bare wire terminations allow for flexible connection to your amplifier.

- Identify Tap Settings:** The transformer has multiple taps for different power levels (6W, 3W, 1.5W, and 0.75W for 70V only). Select the appropriate tap based on your system's design and desired output level.
- Connect Wiring:** Connect the amplifier's output wires to the corresponding bare wire terminals on the loudspeaker. Ensure correct polarity (+ to + and - to -).
- Secure Connections:** Use appropriate connectors (e.g., wire nuts, crimp connectors) to ensure secure and insulated connections.

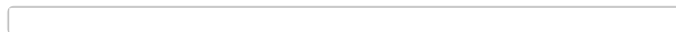


Figure 6: Rear view of the JBL 8124, showing the multi-tap transformer and bare wire connections for 70V/100V systems.

## 4. OPERATION

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Once installed and wired, the JBL 8124 loudspeakers are ready for operation. They are designed to work with compatible audio amplifiers and systems.

### 4.1 System Integration

- Amplifier Connection:** Connect the loudspeakers to a suitable 70V or 100V commercial audio amplifier. Ensure the amplifier's output matches the selected tap setting on the speakers.
- Audio Source:** Connect your audio source (e.g., media player, mixer, microphone) to the amplifier's input.
- Power On:** Power on your amplifier and audio source. Gradually increase the volume to the desired listening level.

### 4.2 Compatible Devices

The JBL 8124 loudspeakers are compatible with a wide range of audio devices when connected through an appropriate

amplifier. These include, but are not limited to: Projectors, MP3 Players, Laptops, Desktops, Televisions, Tablets, and Smartphones.

### 4.3 Control Method

While the speakers themselves are passive, the overall audio system can be controlled via an app if your amplifier or audio matrix system supports app-based control.

## 5. MAINTENANCE

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The JBL 8124 loudspeakers require minimal maintenance. Regular care will ensure optimal performance and longevity.

- **Cleaning:** Gently wipe the grille and visible surfaces with a soft, dry cloth. Avoid using abrasive cleaners or solvents.
- **Environmental Conditions:** Ensure the installation environment is free from excessive moisture, dust, and extreme temperatures. The speaker is not water-resistant.
- **Inspection:** Periodically inspect the speaker for any visible damage or loose connections.

## 6. TROUBLESHOOTING

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If you encounter issues with your JBL 8124 loudspeakers, refer to the following common troubleshooting steps:

Problem	Possible Cause	Solution
No Sound	Amplifier not powered on or faulty. Incorrect wiring or loose connections. Incorrect tap setting on speaker. Audio source issue.	Check amplifier power and status. Verify all wiring connections are secure and correct. Ensure the speaker tap setting matches the amplifier output. Test audio source with another device.
Distorted Sound	Overdriving the amplifier or speaker. Incorrect tap setting. Loose wiring. Damaged speaker.	Reduce amplifier volume. Adjust tap setting to a higher wattage if needed. Check and secure all wiring connections. If distortion persists, contact support.
Low Volume	Amplifier volume too low. Incorrect tap setting (too low wattage).	Increase amplifier volume. Adjust tap setting to a higher wattage.

## 7. SPECIFICATIONS

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Detailed technical specifications for the JBL 8124 Full-Range In-Ceiling Loudspeaker.



Figure 7: Dimensions of the JBL 8124 loudspeaker.

Feature	Specification
Component	4" Full-Range Driver
Frequency Range (-10 dB)	60 Hz - 18 kHz
Sensitivity (2.83V@1m)	93 dB
Coverage	130° Conical
Nominal Driver Impedance	8 Ohm
Driver Power Capacity	25W (Pink Noise, 2 hrs)
70V/100V Transformer Taps	6W, 3W, 1.5W (0.75W at 70V only)
Termination	Bare Wires
Dimensions (Diameter x Depth)	206 mm (8.1 in) diameter round baffle x 89 mm (3.5 in) depth from back of baffle
Cutout Diameter	200 mm (7.9 in)
Net Weight	1.2 kg (2.5 lbs)
Included Accessories	Sculpted Grille
Optional Accessories	MTC-81TB8 Tile Bridge, MTC-81BB8 Backcan
Plenum Usage	Not for use in return air plenums
Color	White
Material	Metal
Mounting Type	Ceiling Mount
Speaker Type	In Ceiling
Special Feature	Multi Room Audio
Recommended Uses	For Surround Sound Systems, Commercial Sound Systems
Connectivity Technology	Wired (Speaker Wires)
Audio Output Mode	Stereo, Mono

*Note: Specifications are subject to change without notice.*

## 8. WARRANTY AND SUPPORT

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### 8.1 Limited Warranty

The JBL 8124 loudspeaker comes with a limited warranty. Please refer to the warranty card included with your product or visit the official JBL Professional website for detailed warranty terms and conditions specific to your region.

### 8.2 Customer Support

For technical assistance, troubleshooting beyond this manual, or warranty claims, please contact JBL Professional customer support. You can find contact information on the official JBL Professional website or through your local distributor.

**JBL Professional Website:** [www.jblpro.com](http://www.jblpro.com)

