

JBL AWC159-BK

JBL Professional AWC159-BK All-Weather Compact 2-Way Coaxial Loudspeaker User Manual

Model: AWC159-BK | Brand: JBL Professional

[Overview](#)

[Setup](#)

[Operation](#)

[Maintenance](#)

[Troubleshooting](#)

[Specifications](#)

[Warranty](#)

[Support](#)

1. PRODUCT OVERVIEW

The JBL Professional AWC159-BK is a compact, coaxial-driver, 2-way, highly weather-resistant full-range loudspeaker system. It is designed for clear speech and extended frequency response for music in various applications, including sports facilities, stadiums, fairgrounds, theme parks, cruise ships, water parks, and other outdoor or indoor venues.

Key Features:

- **Highly weather-resistant IP56 rating:** Ensures durability and performance in challenging environmental conditions.
- **Consistent 90° x 90° broadband pattern control:** Provides uniform sound distribution.
- **Extraordinary clarity for speech, with extended frequency response for music:** Delivers high-quality audio for both vocal and musical content.
- **Advanced high-slope crossover network:** Ensures constant coverage and smooth, natural midrange reproduction.
- **300 Watt 70V/100V multi-tap (built-in transformer) or direct 8Ω low-impedance:** Offers flexible power and impedance options for various audio systems.



Figure 1: Angled view of the JBL Professional AWC159-BK loudspeaker with its mounting bracket.

2. SETUP AND INSTALLATION

Before beginning installation, ensure you have all necessary components and tools. Professional installation is recommended for optimal performance and safety.

2.1 Unpacking and Inspection

Carefully unpack the loudspeaker and inspect it for any signs of damage during transit. Retain all packaging materials for future use or return if necessary.

2.2 Included Components

The package should contain the following items:

- AWC159 15-inch weather-resistant speaker (1 unit)
- U-bracket (1 unit)
- Mounting hardware (bolts, washers)



Figure 2: All components included with the AWC159-BK loudspeaker.

2.3 Mounting the Loudspeaker

The AWC159-BK is designed for coaxial mounting. The included U-bracket facilitates secure installation. Refer to local building codes and safety regulations for proper mounting procedures.

1. **Select Location:** Choose a suitable mounting location that can support the speaker's weight (approximately 58.2 pounds) and provides the desired sound coverage.
2. **Attach U-bracket:** Secure the U-bracket to the mounting surface using appropriate fasteners (not always included, depending on surface type). Ensure the bracket is level and firmly attached.
3. **Mount Speaker:** Attach the loudspeaker to the U-bracket using the provided bolts and washers. Adjust the angle of the speaker as needed for optimal sound direction.



Figure 3: The AWC159-BK loudspeaker securely mounted with its U-bracket.

2.4 Wiring Connections

The AWC159-BK offers flexible wiring options for 70V/100V constant voltage systems or direct 8Ω low-impedance applications. The connection panel is located at the rear of the unit.

1. **Identify Terminals:** Locate the 'IN' and 'THRU' terminals on the connection panel. These are typically marked with '+' and '-' for polarity.
2. **Select Tap Setting (for 70V/100V systems):** If using a constant voltage system, select the appropriate wattage tap setting (e.g., 75W, 150W, 300W) using the rotary switch or jumpers on the connection panel.
3. **Connect Audio Cables:** Connect your amplifier's output to the 'IN' terminals. Ensure correct polarity (+ to + and - to -). If daisy-chaining multiple speakers, use the 'THRU' terminals to connect to the next speaker.
4. **Secure Connections:** Ensure all wire connections are tight and secure to prevent signal loss or short circuits.



Figure 4: Detailed view of the rear connection panel with input terminals and tap selector.

3. OPERATION

Once the JBL Professional AWC159-BK loudspeaker is correctly installed and wired, operating it involves managing the audio source and amplifier.

3.1 Powering On the System

1. Ensure all connections are secure.
2. Turn on your audio source (e.g., mixer, media player).
3. Power on your amplifier. Start with the amplifier volume at its lowest setting.

3.2 Adjusting Audio Levels

1. Gradually increase the amplifier volume to a desired listening level.
2. Monitor for any distortion or clipping. If distortion occurs, reduce the volume from the amplifier or audio

source.

3. The AWC159-BK is a passive speaker and does not have direct user controls on the unit itself, aside from the initial tap setting for constant voltage systems. All adjustments are made via the connected amplifier and audio source.

3.3 Touch Control (if applicable)

While primarily a passive speaker, some system integrations may utilize external touch-based control methods for overall audio management. Refer to your specific audio system's documentation for details on integrated control methods.

4. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your JBL Professional AWC159-BK loudspeaker.

4.1 Cleaning

- Use a soft, dry cloth to wipe down the exterior of the speaker.
- For stubborn dirt, a slightly damp cloth with mild soap can be used, followed by a dry cloth.
- Avoid using harsh chemicals, solvents, or abrasive cleaners, as these can damage the finish and weather-resistant coating.

4.2 Inspection

- Periodically inspect the speaker for any physical damage, especially if installed outdoors.
- Check all mounting hardware and connections to ensure they remain secure. Tighten any loose bolts or screws.
- Given its IP56 weather-resistant rating, the speaker is designed to withstand dust and water ingress. However, ensure no debris is obstructing the grille or ports.

4.3 Storage

If the speaker needs to be stored for an extended period, especially in harsh conditions, it is recommended to store it in its original packaging in a dry, temperature-controlled environment.

5. TROUBLESHOOTING

This section provides solutions to common issues you might encounter with your AWC159-BK loudspeaker.

Problem	Possible Cause	Solution
No sound from speaker	<ul style="list-style-type: none">• Incorrect wiring• Amplifier off or faulty• Audio source off or faulty• Incorrect tap setting (for 70V/100V systems)	<ul style="list-style-type: none">• Check all audio cable connections for correct polarity and secure fit.• Ensure the amplifier is powered on and functioning correctly.• Verify the audio source is active and sending a signal.• Confirm the tap setting matches the amplifier output.

Problem	Possible Cause	Solution
Distorted or unclear sound	<ul style="list-style-type: none"> Overdriven amplifier/speaker Loose connections Damaged speaker component 	<ul style="list-style-type: none"> Reduce the volume level from the amplifier or audio source. Check all wiring connections for tightness. Inspect the speaker cone for visible damage. If damaged, contact JBL Professional support.
Intermittent sound	<ul style="list-style-type: none"> Loose or corroded connections Faulty cable 	<ul style="list-style-type: none"> Inspect and re-secure all connections. Clean any corrosion. Try replacing the audio cable.

6. SPECIFICATIONS

Detailed technical specifications for the JBL Professional AWC159-BK loudspeaker.

Feature	Detail
Model Name	AWC159-BK
Mounting Type	Coaxial
Speaker Type	Outdoor
Special Feature	Waterproof (IP56 rated)
Recommended Uses	Music, Indoor, Outdoor
Compatible Devices	Desktop, Laptop, MP3 Player, Projector, Smartphone, Tablet, Television
Subwoofer Diameter	15 Inches
Unit Count	1.0 Count
Surround Sound Channel Configuration	2.0
Color	Black
Included Components	AWC159 15-inch weather-resistant speaker, U-bracket
Item Weight	58.2 Pounds
Impedance	8 Ohm
Number of Items	1
Control Method	Touch (via integrated system)
Speaker Size	15 Inches
Power Source	Corded Electric
Woofer Diameter	15 Inches

Feature	Detail
Tweeter Diameter	1.5 Inches
Audio Driver Type	Dynamic Driver
Audio Driver Size	15 Inches
Subwoofer Connectivity Technology	Wired
Product Dimensions	16 x 15 x 15 inches
Manufacturer	JBL Professional
Speaker Amplification Type	Passive
Speaker Maximum Output Power	300 Watts
Frequency Response	52 Hz (lower limit)
Connectivity Technology	Coaxial
Audio Output Mode	Mono
UPC	050036905312





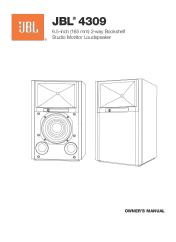
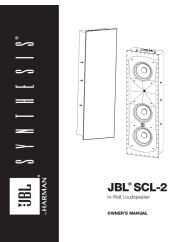
7. WARRANTY INFORMATION

The JBL Professional AWC159-BK loudspeaker comes with a **Limited Warranty**. Specific terms and conditions of the warranty may vary by region and retailer. Please retain your proof of purchase for warranty claims. For detailed warranty information, please refer to the official JBL Professional website or contact their customer support directly.

8. CUSTOMER SUPPORT

For further assistance, technical support, or service inquiries regarding your JBL Professional AWC159-BK loudspeaker, please contact JBL Professional customer support. You can find more information and contact details on the official JBL Professional website:[Visit the JBL Store on Amazon](#)

When contacting support, please have your product model number (AWC159-BK) and serial number ready.

	<p>JBL AWC82 All-Weather Compact 2-Way Coaxial Loudspeaker - Technical Specifications and Features</p> <p>Detailed specifications, key features, applications, performance data, and warranty information for the JBL AWC82 all-weather compact coaxial loudspeaker with an 8-inch LF driver.</p>
	<p>JBL 4367 Owner's Manual: 15-inch 2-Way Floorstanding Loudspeaker</p> <p>This owner's manual provides detailed information on the JBL 4367, a 15-inch 2-way floorstanding loudspeaker. Learn about setup, placement, connections, controls, and care for optimal audio performance.</p>
	<p>JBL Control 416C/T Standard Coverage Series Ceiling Loudspeaker - Technical Specifications</p> <p>Detailed technical specifications, features, and performance data for the JBL Control 416C/T, a 6.5-inch two-way coaxial ceiling loudspeaker designed for commercial and professional audio installations.</p>
	<p>Connecting JBL Speakers Together: A Comprehensive Guide</p> <p>Learn how to connect multiple JBL speakers wirelessly via Bluetooth for an enhanced audio experience. This guide covers connecting JBL speakers using the JBL Connect and Connect+ features, as well as troubleshooting common connection issues.</p>
	<p>JBL 4309 Studio Monitor Loudspeaker Owner's Manual</p> <p>Owner's manual for the JBL 4309 6.5-inch 2-way bookshelf studio monitor loudspeaker. Provides setup, connection, care, and specification details for optimal home audio performance.</p>
	<p>JBL SCL-2 In-Wall Loudspeaker Owner's Manual</p> <p>Comprehensive owner's manual for the JBL SCL-2 in-wall loudspeaker, covering installation, placement, wiring, and specifications for optimal home theater audio performance.</p>