

## AOC ACG2502

# AOC Wireless Gaming Headset - ACG2502 User Manual

Brand: AOC | Model: ACG2502

## INTRODUCTION

This manual provides comprehensive instructions for the setup, operation, and maintenance of your AOC ACG2502 Wireless Gaming Headset. Designed for versatile gaming across multiple platforms, this headset offers high-fidelity audio, clear communication, and extended comfort for prolonged use.

Video: An official product video from AOC AudioNest Store showcasing the AOC Wireless Gaming Headset's features and compatibility with PS5, PS4, PC, Switch, and laptops.

## PACKAGE CONTENTS

- 1 x ACG2502 Gaming Headset
- 1 x USB Transmitter (2.4GHz Wireless Dongle)
- 1 x Type-C Charging Cable
- 1 x Type-C to 3.5mm Audio Cable
- 1 x User Manual

## PRODUCT FEATURES

### Dual-Mode Wireless Connectivity

The ACG2502 supports both 2.4 GHz wireless and Bluetooth 5.4 connections, ensuring ultra-low latency (up to 20ms) for synchronized audio. The 2.4 GHz USB transmitter provides a stable connection for PC, PS5, PS4, and Nintendo Switch. Bluetooth 5.4 is ideal for mobile devices and PCs. Note: Bluetooth modes are not compatible with PS5 or PS4.

# AOC GAMING HEADSET



Hi-Res  
Audio



Bluetooth  
& 2.4GHz



<20ms Low  
Latency



Breathable &  
Comfortable



Noise  
Canceling Mic



Multi-  
Platform



Image: The AOC Gaming Headset showcasing its key features including Hi-Res Audio, dual 2.4GHz and Bluetooth connectivity, ultra-low latency, comfortable design, noise-canceling microphone, and multi-platform compatibility.

# DUAL-MODE WIRELESS

Stable & Lag-Free

20ms



Image: A close-up of the 2.4GHz USB dongle, emphasizing stable and lag-free dual-mode wireless connectivity with a 20ms latency.

## Universal Compatibility

This headset offers 4-in-1 universal connectivity: USB-A, Type-C, Bluetooth 5.4, and 3.5mm wired modes. It is compatible with PC, PS5, PS4, Nintendo Switch, mobile devices, and more. For Xbox Series X/S, only the 3.5mm wired mode is supported.

# MULTI-PLATFORM COMPATIBLE



## 📶 2.4GHz Mode

PC/Laptop/Mac/Switch  
PS/PS2/PS4/PS5  
Mobile Phone

## 📶 Bluetooth Mode

PC/Laptop/Mac  
Mobile Phone

## 🎧 Wired Mode

PC/Laptop/Mac  
PS5/PS4/Switch  
Xbox Series X/S

\* Switch does not support microphone functionality.

\* Only the 3.5mm wired mode is compatible with Xbox Series X/S, while all other Xbox models are not supported.

Image: A visual guide illustrating the headset's compatibility with multiple platforms including USB for PS4/PS5, Bluetooth for phones, wired connection for PS5 controllers, and Type-C for Nintendo Switch.

## High-Resolution Audio & Virtual Surround Sound

Equipped with dual acoustic chambers and 50mm graphene diaphragms, the headset delivers 96 kHz/24-bit output via a built-in DAC. This setup provides high-resolution 7.1 virtual surround sound, allowing for precise directional audio cues in gaming environments.

# HI-RES GAMING AUDIO

50mm Drivers + Pro DAC Chip + Graphene Diaphragm Tech

Ear Cushion

Integrated Head  
Beam Design

Ring Transducer

Neodymium Magnet

PET Shockproof Protector

Image: An exploded view diagram detailing the internal components of the headset's 50mm drivers, highlighting the ear cushion, integrated head beam design, ring transducer, neodymium magnet, and PET shockproof protector for high-resolution gaming audio.

## Ergonomic Comfort

Weighing only 239g, the headset features protein-leather earcups with breathable foam and an adjustable headband. This design ensures even clamp pressure and reduces fatigue during extended gaming sessions.

# ALL-DAY COMFORT



239g  
Lightweight



Ergonomic  
Fit Ultra



Protein  
Leather



Image: A close-up of the headset's earcups, illustrating the breathable protein-leather material and lightweight design for all-day comfort during use.

## Triple-Stage Noise Canceling Microphone

The boom microphone incorporates three stages of noise cancellation: foam isolation for physical sound blocking, DSP filters for echo and background noise reduction, and AI-driven voice enhancement for clear communication.

# TRIPLE VOICE CLARITY MIC

DSP + AI Noise Canceling + Physical Isolation



Image: A visual representation of the headset's triple-stage noise-canceling microphone, detailing DSP, AI noise canceling, and physical isolation for clear voice clarity, along with its 360° adjustable rotating feature.

## Long-Lasting Battery with Fast Charge

The headset provides up to 45 hours of gameplay on a single charge. A full recharge takes approximately 2 hours via USB-C. The headset supports gaming while charging, ensuring uninterrupted play.

# 45H BATTERY LIFE

Charge While You Play



Image: An illustration highlighting the headset's impressive 45-hour battery life and the convenience of charging while playing.

## SETUP

### 2.4 GHz Wireless Connection (PC, PS5, PS4, Nintendo Switch)

1. Insert the USB Transmitter (dongle) into an available USB-A port on your device.
2. Power on the headset by pressing and holding the Power Button for 3 seconds.
3. The headset will automatically connect to the transmitter. The indicator light on the transmitter will turn solid white, and the headset's blue light will stay on upon successful connection.
4. Ensure the headset is selected as the audio output device in your system settings.

### Bluetooth 5.4 Connection (PC, Mobile Devices)

1. Press and hold the Power Button for 3 seconds to turn on the headset.
2. Double-click the Power Button to switch to Bluetooth pairing mode. The indicator light will blink blue.
3. On your mobile phone or PC, open Bluetooth settings and search for "AOC ACG2502".



4. Select the headset to pair. Upon successful pairing, the headset's blue light will remain solid.

## Wired Connection (PC, PS5, PS4, Nintendo Switch, Xbox Series X/S, Mobile Devices)

1. Connect the Type-C end of the included Type-C to 3.5mm Audio Cable to the headset's Type-C port.
2. Connect the 3.5mm end of the cable to the 3.5mm audio jack on your desired device (e.g., PS5 controller, PC audio port, mobile phone).
3. Note: For Xbox Series X/S, only the 3.5mm wired mode is compatible. Microphone functionality may be disabled in certain wired configurations, especially with Nintendo Switch.

## OPERATING INSTRUCTIONS



Image: A detailed diagram illustrating the easy-to-use buttons on the headset, including controls for microphone, light, volume, power, and the Type-C charging interface.

## Button Functions

### 1. Microphone & Light Switch

**Single click:** Toggle microphone mute/unmute.

**Double click:** Toggle ambient RGB lighting on/off.

## 2. Volume +/- Button

**Click Volume '+':** Increase volume.

**Press and hold Volume '+':** Continuously raise volume.

**Click Volume '-':** Decrease volume.

**Press and hold Volume '-':** Continuously lower volume.

## 3. Power Button

**Long press (3 seconds):** Turn headset On/Off.

**Single click (in Bluetooth mode):** Play/Pause audio or answer a call.

**Double click (in Bluetooth mode):** End or reject a call.

## 4. Type-C Charging Interface

Connect the Type-C Charging Cable here to charge the headset.

This port also serves as the input for the Type-C to 3.5mm Audio Cable for wired connections.

# MAINTENANCE

- **Cleaning:** Use a soft, dry cloth to clean the headset. Avoid abrasive cleaners or solvents.
- **Storage:** Store the headset in a cool, dry place away from direct sunlight and extreme temperatures.
- **Battery Care:** To prolong battery life, avoid fully discharging the headset frequently. Recharge when the battery low indicator is heard.
- **Microphone Care:** Handle the adjustable microphone gently. Avoid excessive bending or twisting.

# TROUBLESHOOTING

Issue	Possible Solution
No audio/microphone not working	Ensure the headset is powered on and correctly paired/connected. Check system audio settings to confirm the headset is selected as the input/output device. For wired connections, ensure the 3.5mm cable is fully inserted. Note specific compatibility limitations for microphone on Nintendo Switch and Xbox models.
Headset not pairing via Bluetooth	Ensure the headset is in Bluetooth pairing mode (blinking blue light). Turn off and on your device's Bluetooth. Try forgetting the device in your Bluetooth settings and re-pairing. Ensure no other devices are actively connected to the headset.
2.4 GHz wireless connection unstable	Ensure the USB transmitter is securely plugged in. Move closer to the transmitter to reduce interference. Avoid obstacles between the headset and transmitter.
Battery not charging	Ensure the Type-C charging cable is properly connected to both the headset and a power source. Try a different USB port or power adapter.

# SPECIFICATIONS

- **Model Name:** ACG2502

- **Connectivity Technology:** Wireless (2.4GHz USB dongle, Bluetooth 5.4), Wired (3.5mm Jack)
- **Audio Driver Size:** 50mm Neodymium Drivers
- **Frequency Response:** 20Hz - 20kHz
- **Impedance:** 32 Ohm
- **Sensitivity:** 90 dB
- **Noise Control:** Passive Noise Cancellation (Triple-Stage Mic)
- **Battery Life:** Up to 45 Hours
- **Charging Time:** Approximately 2.5 Hours (via USB-C)
- **Item Weight:** 8.48 ounces (239g)
- **Material:** Polyurethane (PU), Acrylonitrile Butadiene Styrene (ABS)
- **Transmission Distance (2.4GHz):** Up to 10 meters

## WARRANTY AND SUPPORT

AOC stands behind the quality of the ACG2502 Wireless Gaming Headset with industry-leading engineering and customer support.

- **Customer Support:** 24/7 online customer support is available for any inquiries or assistance.
- **Return Policy:** Enjoy a 60-day hassle-free return policy from the date of purchase.
- **Warranty:** The headset comes with a 1-year free replacement or repair warranty for manufacturing defects.

For further assistance, please refer to the contact information provided in your product packaging or visit the official AOC support website.