Hiwill WoNoble A502

Hiwill WoNoble A502 Soundbar User Manual

5.2.2ch Dolby Atmos 3D Spatial Sound System

Box	Features	Setup	Operating	Overview Maintenance & Support	What's in the Troubleshooting	Specifications	Warranty

1. PRODUCT OVERVIEW

The Hiwill WoNoble A502 is a premium 5.2.2 channel soundbar designed to deliver an immersive audio experience with Dolby Atmos 3D spatial sound. Crafted with a clean wooden finish, it integrates seamlessly into any home entertainment setup. This all-in-one soundbar features 9 high-performance drivers, including up-firing and side-firing speakers, along with dual built-in subwoofers, to provide rich, detailed, and powerful 400W surround sound.

Figure 1: Hiwill WoNoble A502 Soundbar with a television, showcasing its sleek design and integration.

Figure 2: The WoNoble A502 soundbar positioned below a television in a modern living space, highlighting its aesthetic appeal.

2. WHAT'S IN THE BOX

Upon opening your Hiwill WoNoble A502 Soundbar package, please ensure all the following components are present:

- Hiwill WoNoble A502 Soundbar
- Power Cord
- 3.5mm Audio Cable
- HDMI eARC Cable
- Digital Optical Cable
- User Manual (this document)
- Remote Control with 2 AAA Batteries

3. KEY FEATURES

The Hiwill WoNoble A502 Soundbar is engineered with advanced audio technologies and premium materials to deliver an exceptional listening experience:

- **5.2.2 Channel System:** Provides a comprehensive soundstage with dedicated channels for front, surround, and overhead effects.
- **Dolby Atmos 3D Spatial Audio:** Delivers object-based sound that moves around and above you, creating a truly immersive three-dimensional audio environment.
- **Wooden Enclosure:** Leverages the natural acoustic properties of wood for superior sound performance, enhancing resonance and minimizing distortion.
- **9 Precision-Engineered Drivers:** Includes up-firing drivers for vertical sound effects, side-firing tweeters for expanded horizontal sound, and full-range drivers.
- **Dual Built-in 2.5-inch Subwoofers:** Enhances low-frequency balance, providing deep, resonant bass with minimal distortion.
- **400W Peak Output Power:** Ensures powerful and dynamic audio reproduction.
- **Advanced Driver Components:** Features lightweight yet durable magnesium-aluminum diaphragms, voice coils, and Neodymium magnets for crystal-clear, richly detailed high frequencies.
- **Proprietary Audio Technologies:** Incorporates Resonance Optimization Architecture Technology and HarmonicX Sound Processing Technology for optimized sound wave alignment and impact.
- **Upgraded 2x3" Racetrack Central Speaker:** Dedicated to enhancing dialogue clarity and audio positioning.
- **Versatile Connectivity:** Supports HDMI eARC, Optical, USB, Auxiliary, and Bluetooth 5.3 for seamless integration with various devices.

Figure 3: Illustration of wood layers, emphasizing the acoustic advantages of the soundbar's wooden construction for superior sound quality.

9-driver All-wood Soundbar

- 🔊 Up-firing Drivers
- 🔊 Side-firing Drivers
- 🔊 Built-in Subwoofer
- ◎ Full-rang Drivers
- � Racetrack Central Speaker

Figure 4: An exploded diagram showing the internal components of the 9-driver all-wood soundbar, including up-firing drivers, built-in subwoofers, and full-range drivers.

Figure 5: Visual representation of the three-dimensional spatial audio experience provided by Dolby Atmos, with sound waves enveloping the listening area.

Figure 6: Close-up of the soundbar demonstrating precise positioning of vertical sound effects through its up-firing drivers.

Figure 7: Depiction of the soundbar's ability to enhance the overall horizontal sound effect, creating a wider and more immersive sound field.

4. SETUP AND CONNECTIONS

4.1 Placement

The Hiwill WoNoble A502 Soundbar can be placed on a tabletop or mounted on a wall. For optimal audio performance, position the soundbar centrally below your television, ensuring no obstructions block the front, top, or side-firing drivers.

4.2 Connecting to Your TV/Devices

The soundbar offers multiple connectivity options. For the best audio quality and full Dolby Atmos support, HDMI eARC is recommended.

Recommended Connection Methods			
Connection Method	Audio Quality	Supports Dolby Atmos	Recommendation Rating
HDMI eARC	Best (uncompressed high-res audio)	Fully supported	★★★★★
HDMI ARC	Good (compressed audio)	Partially supported*	★★★★
Optical	Fair (compressed audio)	Not supported	★★★
Bluetooth 5.3	Fair (wireless transmission)	Not supported	★★
AUX (3.5mm)	Poor (stereo audio)	Not supported	★

*"Partially supported" means that HDMI ARC can only support Atmos transmitted via Dolby Digital Plus, but not Dolby TrueHD Atmos.

HDMI eARC vs. HDMI ARC Comparison

HDMI eARC vs. HDMI ARC

Feature	HDMI eARC	HDMI ARC
Full Name	Enhanced Audio Return Channel	Audio Return Channel
Bandwidth	Up to 37 Mbps	Up to 1 Mbps
Audio Format Support	Uncompressed audio formats (e.g., Dolby Atmos/Dolby TrueHD/DTS:X/PCM 7.1/DTS-HD Master Audio)	Compressed audio formats (e.g., Dolby Digital/PCM 2.0 (stereo))
Channel Support	Up to 7.1 channels, even 32 channels (e.g., Dolby Atmos)	Up to 5.1 channels
Audio Quality	High-resolution audio (e.g., 24-bit/192kHz)	Standard-definition audio
Latency	Very low (optimized lip-sync)	Higher (may affect lip-sync)
Device Compatibility	Requires HDMI 2.1 or later	Requires HDMI 1.4 or later
Cable Requirements	High-speed HDMI cable (supports 18 Gbps) (package has included)	Standard HDMI cable

5. OPERATING INSTRUCTIONS

5.1 Basic Controls

The soundbar can be controlled using the included remote control or the buttons on the unit itself. Refer to the remote control diagram in your quick start guide for specific button functions.

5.2 Firmware Update Guide

Keeping your soundbar's firmware updated ensures optimal performance, introduces new features, and resolves potential issues. The WoNoble A502 supports firmware updates via USB.

Figure 8: A visual representation of the firmware update process and its benefits, including expanded soundstage, clearer dialogue, deeper bass, smart memory function, reduced default volume, auto LED off, and softer screen brightness.

Firmware Update Steps:

1. **Download Firmware:** Obtain the latest firmware file (e.g.,spupdate.bin) from Hiwill support and place it in the root directory of a USB flash drive.

2. **Prepare Soundbar:** Turn the soundbar on (or restart it if already on) and switch it to USB mode.

3. **Insert USB:** Insert the USB flash drive containing the firmware into the USB port on the soundbar.

4. **Initiate Update:** Press and hold the **[Play/Pause]** button on the remote control until a number is displayed on the soundbar's screen. Continue holding until "HI" appears, indicating a successful update.

5. **Power Cycle:** Unplug the soundbar's power supply, wait for a few seconds, and then plug it back in. This ensures the firmware is fully applied.

6. **Adjust TV Audio Settings:** After the upgrade, check your TV's audio output settings and set it to 'PASSTHROUGH' for optimal performance. (Go to: TV Settings > Sound > Audio Processing > Select "Off" > Digital Audio Output > Select "Passthrough").

7. **Restart Soundbar:** Finally, restart the soundbar to enjoy the upgraded sound.

Video 1: Official Firmware Update Guide for Hiwill Soundbars (Applicable for A502). This video demonstrates the step-by-step process of updating your soundbar's firmware using a USB drive and remote control.

6. MAINTENANCE

To ensure the longevity and optimal performance of your Hiwill WoNoble A502 Soundbar, follow these maintenance guidelines:

- **Cleaning:** Use a soft, dry cloth to clean the surface of the soundbar. Avoid using liquid cleaners, aerosols, or abrasive materials, as they may damage the wooden finish or electronic components.
- **Ventilation:** Ensure adequate ventilation around the soundbar. Do not block any ventilation openings.
- **Environment:** Keep the soundbar away from direct sunlight, heat sources, excessive dust, moisture, and strong magnetic fields.
- **Power:** Unplug the soundbar from the power outlet during lightning storms or when unused for long periods.
- **Handling:** Handle the soundbar with care. Avoid dropping or subjecting it to strong impacts.

7. TROUBLESHOOTING

If you encounter issues with your Hiwill WoNoble A502 Soundbar, please refer to the following common problems and solutions:

Common Troubleshooting Guide

Problem	Possible Cause	Solution
No power / Soundbar won't turn on	Power cable not connected; Faulty power adapter	Ensure power cable is securely connected. Try a different power outlet. If issue persists, contact support for power adapter replacement.
No sound	Incorrect input source; Loose audio cable; TV audio settings incorrect; Soundbar muted or volume too low	Select correct input (HDMI eARC, Optical, AUX, Bluetooth). Check all cable connections. Ensure TV audio output is set to 'PASSTHROUGH' or 'External Speaker'. Unmute soundbar and increase volume.
Distorted sound / Poor audio quality	Incorrect audio settings; Poor connection; Interference; Outdated firmware	Check TV audio output settings (e.g., ensure not downmixing Dolby Atmos). Try a different cable. Keep soundbar away from other electronic devices. Perform a firmware update (see Section 5.2).
Lack of bass depth	Bass settings too low; Room acoustics; Placement	Adjust bass level using the remote control. Ensure soundbar is not placed in an enclosed cabinet. Experiment with placement to optimize bass response.
Settings reset after power off/sleep	Firmware issue (older batches)	Update to the latest firmware. Newer firmware versions include a 'Smart Memory Function' to retain settings.

Problem	Possible Cause	Solution
LED display too bright	Default brightness setting	Update to the latest firmware. Newer firmware versions offer 'Softer Screen Brightness' or auto LED off (30s).
Remote control not working	Dead batteries; Obstruction; Remote not paired	Replace batteries. Ensure no obstructions between remote and soundbar. Point remote directly at the soundbar's sensor.

8. TECHNICAL SPECIFICATIONS

Hiwill WoNoble A502 Soundbar Specifications	
Attribute	**Detail**
Model Name	WoNoble A502
Speaker Type	Soundbar
Surround Sound Channel Configuration	5.2.2
Audio Encoding	Dolby Atmos
Speaker Maximum Output Power	400 Watts
Frequency Response	20 KHz
Material	Wood
Product Dimensions (D x W x H)	4.75" x 33" x 3.25"
Item Weight	11 Pounds
Mounting Type	Tabletop or Wall Mount
Connectivity Protocol	Auxiliary, Bluetooth 5.3, USB, Optical, HDMI eARC
Bluetooth Range	33 Feet
Subwoofer Connectivity Technology	Wired (Built-in)
Controller Type	Button, Remote Control
Power Source	Corded Electric
Recommended Uses	Surround Sound Systems, Gaming Consoles, Televisions, Computers, Smartphones/Tablets, DVD Players
Compatible Devices	Projector, Television, Desktop, Home Theater, Smartphone

9. WARRANTY AND SUPPORT

9.1 Product Warranty

The Hiwill WoNoble A502 Soundbar comes with an extended warranty. For specific details regarding the warranty period and coverage, please refer to the warranty card included in your product packaging or contact Hiwill customer support directly.

9.2 Customer Support

For any technical assistance, troubleshooting not covered in this manual, or warranty inquiries, please contact Hiwill customer support. You can find contact information on the official Hiwill website or through the retailer where you purchased the product.
Hiwill is committed to providing high-quality audio products and continuous support through firmware updates and customer service.