

MekedeTech DUDU7-12.3inch-12+256GB

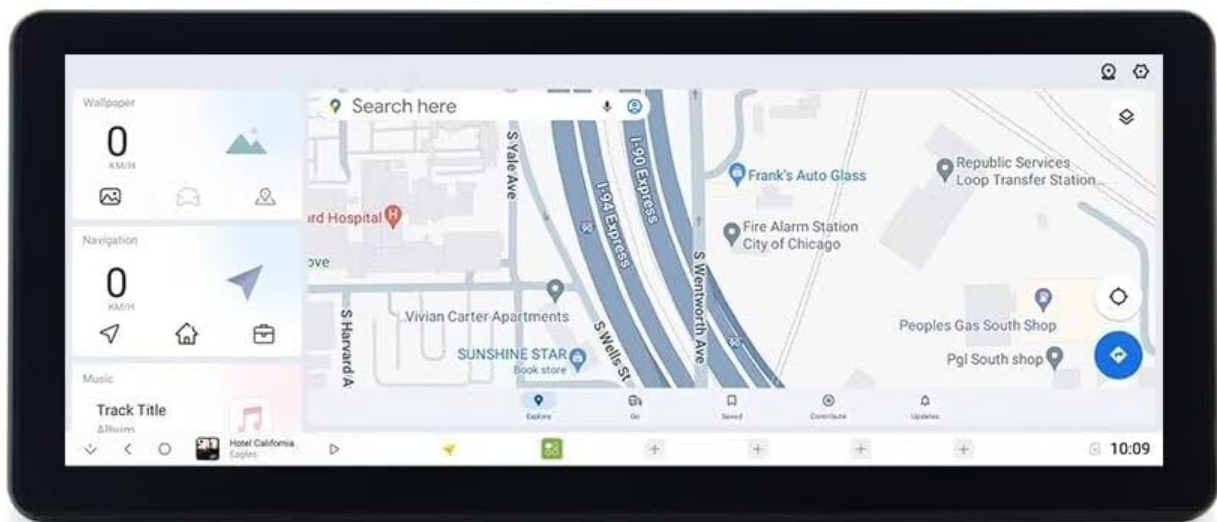
MekedeTech DUDUAUTO DUDU7 Car Multimedia Head Unit User Manual

Model: DUDU7-12.3inch-12+256GB | Brand: MekedeTech

1. INTRODUCTION AND OVERVIEW

This manual provides detailed instructions for the installation, operation, and maintenance of your MekedeTech DUDUAUTO DUDU7 Double Din Universal Android 13 Car Radio Screen. This advanced multimedia head unit is designed to enhance your in-car entertainment and navigation experience with its powerful Android 13 operating system, large QLED display, and comprehensive connectivity options.

The DUDUAUTO DUDU7 features a 12.3-inch 1920x720 QLED screen, an 8-core UIS7870 processor, and 12GB RAM with 256GB ROM, ensuring smooth performance. It supports wireless CarPlay and Android Auto, offering seamless integration with your smartphone for navigation, communication, and media playback.

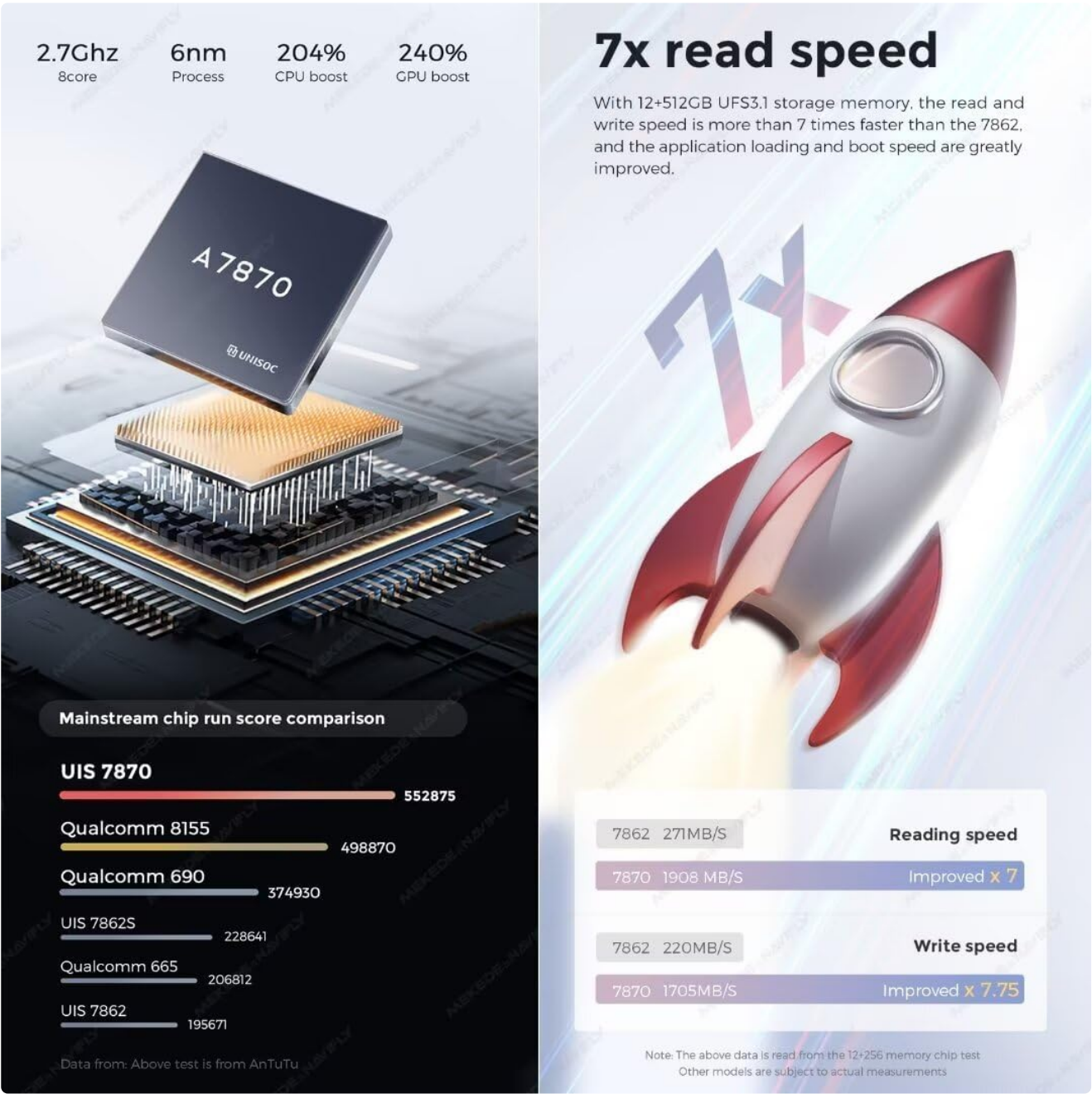


This image displays the 12.3-inch QLED screen of the DUDUAUTO DUDU7 head unit, showcasing its user interface with a navigation map prominently featured. On the left, widgets for speed and media playback are visible, demonstrating the multi-functional display capabilities.

2. PRODUCT FEATURES

2.1. High-Performance System

- **Operating System:** Android 13 with DUDU OS 3.0, offering a new custom smarter system with intelligent innovation and 6 customizable layouts.
- **Processor:** 8 Core UIS7870 Customized version A76 2.7Ghz 6nm processor for robust performance.
- **Memory:** UFS 3.1 Read data 1700M+ for faster application loading and boot speeds.
- **Display:** 12.3-inch 1920*720 QLED car screen for vibrant visuals.



This graphic highlights the performance capabilities of the UIS 7870 A76 8-core processor, emphasizing its 2.7GHz clock speed and 6nm process. It also presents a comparison of read and write speeds, indicating a significant improvement of up to 7 times faster read speed and 7.75 times faster write speed, attributed to the UFS 3.1 storage.

2.2. Seamless Connectivity

- **Wireless CarPlay & Android Auto:** Enjoy seamless smartphone integration without the need for cables,

allowing access to navigation, calls, messages, and music.

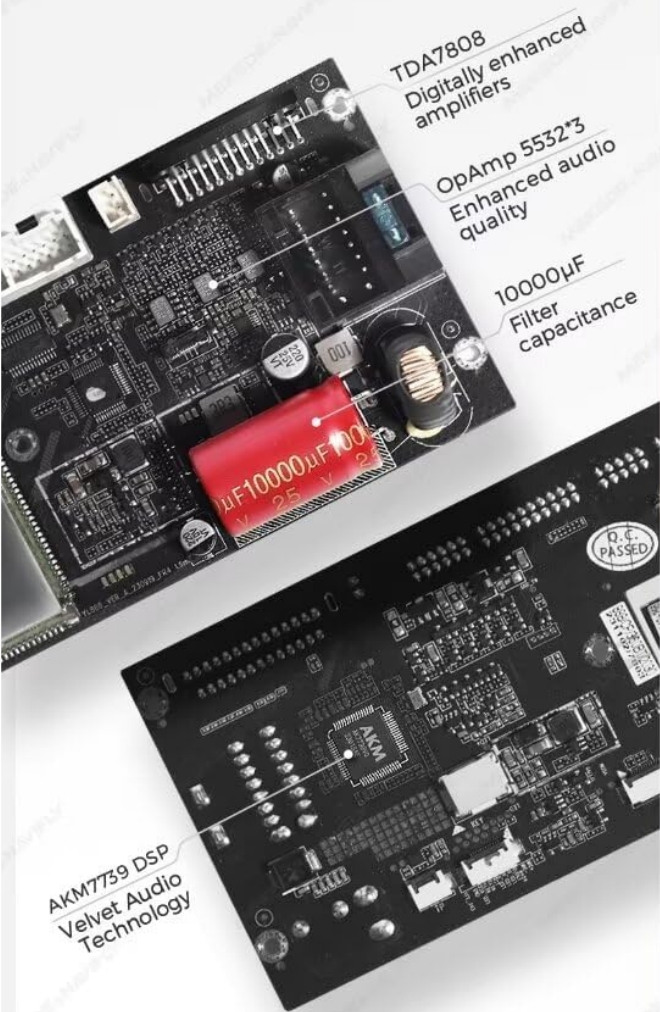
- **Bluetooth 5.1:** Equipped with Qualcomm 3031 chip for low power consumption, faster transmission speed, and stable signal, supporting aptx HD protocol for good sound quality.
- **Wi-Fi:** 802.11a/b/g/n/ac support, including 5G WIFI for fast internet access.
- **USB Ports:** Includes USB 3.2 GEN1*1 (TYPE-C) and USB2.0*3 for versatile connectivity.

2.3. Advanced Audio and Navigation

- **DSP:** AKM7739 Velvet Audio Technology with TDA7808 Digital AB type power amplifier for superior sound quality, supporting Optical + Coaxial and RCA 5.1 Channel Outputs.
- **GPS:** Dual Band 6 mode L1 L5 B1 B2a E1 E5a for precise and reliable positioning.
- **Microphone:** Digital Noise Cancellation Microphone for clear voice commands and calls.

Choosing reputation audio chip

in an industry-wide



TDA7808
Digitally enhanced
amplifiers

OpAmp 5532*3
Enhanced audio
quality

10000µF
Filter
capacitance

AKM7739 DSP
Velvet Audio
Technology

AKM7739 DSP Velvet Audio Technology

Support "VELVET SOUND" +DTS5.1 panoramic sound+ sound correction system, reproduces a natural, comfortable, sense of presence acoustic experience.



VELVET SOUND

VELVET SOUND

VELVET SOUND - AKM advanced audio processing technology, based on the original sound reproduction product concept, explores the limits of audio technology, and presents all sound details without reservation, creating a "like, immersive" sound world.

This graphic focuses on the audio components of the head unit, specifically the AKM7739 DSP Velvet Audio Technology and the TDA7808 Digital AB type power amplifier. It explains how these components work together to provide a high-quality audio experience, including support for 5.1 panoramic sound and DTS sound correction.

Dual Band GPS L1+L5

Better Positioning and Signal



GPS Band	Position accuracy	Star collecting capacity	Positioning speed
L1	3-5M	15-35 stars	Slow
L1+L5	1-2M	30-60 stars	Fast

Note: The above test comes from the Amap car version data, lane positioning navigation depends on country to be supported

Digital Noise Cancelling MIC

Delivering your voice clearly



This image details two key features: Dual Band GPS (L1+L5), which offers enhanced positioning accuracy and signal stability for navigation, and the Digital Noise Cancelling Microphone, designed to deliver clear voice commands and calls by effectively filtering out ambient noise.

3. SPECIFICATIONS

Feature	Specification
Model Number	DUDU7-12.3A
Operating System	Android 13
CPU	8 Core UIS7870 Customized version A76 2.7Ghz 6nm processor
Memory (RAM/ROM)	12GB RAM / 256GB ROM (UFS 3.1)

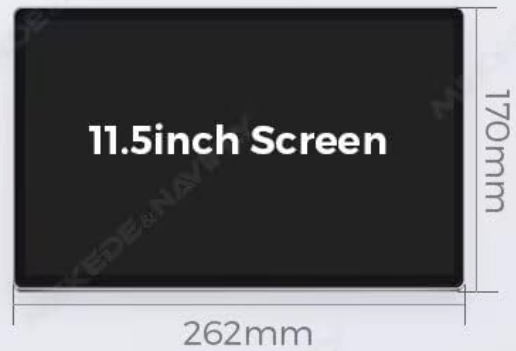
Feature	Specification
Display	12.3 inch 1920x720 QLED
GPS	Dual Band 6 mode L1 L5 B1 B2a E1 E5a
Microphone	Digital Noise Cancellation Microphone
USB Ports	USB 3.2 GEN1*1 (TYPE-C), USB2.0*3
Power Amplifier	TDA7808 Digital AB type
DSP	AKM7739 Velvet Audio Technology
Bluetooth Chip	Qualcomm 3031 (BT5.0, supports aptx HD)
Audio Output	Optical + Coaxial, RCA 5.1 Channel Outputs
WiFi Type	802.11a/b/g/n/ac Support 5G WIFI
Radio IC	TDA7708
Work Voltage	9V~16V
Output Power	45 Watts

	DUDU6			DUDU7			
RAM/ROM	6+64	8+128	8+256	6+64	8+128	12+256	12+512
CPU	8-Core UIS7862S Customized version A55 2.0Ghz 12nm process			8-Core UIS7870 Customized version A76 2.7Ghz 6nm process			
Memory type	emmc 5.1			UFS 3.1 Read data 1700M+			
GPS	3 mode L1 B1 E1			Dual Band 6 mode L1 L5 B1 B2a E1 E5a			
MIC	Condenser MIC			Digital noise cancelling MIC			
USB interface	USB 2.0*3			Type-C USB 3.2 Gen1*1 USB 2.0*3			
Power amplifier	TDA7850			TDA7808 Digital enhanced Class AB power amplifier			
DSP	AKM7738			AKM7739 Velvet audio technology			
Amp	2582*3			5532*3 Enhanced audio signal			
Android version	Android 10 API=29			Android 13 API=33			

car machine system	DUDU OS3.0
Audio output	Fiber + coaxial RCA5.1 channel output
BT chip	BT5.0 Qualcomm 3031 supports the aptx HD protocol
Filter capacitance	10000μF
Screen	9.5" / 10.36" / 11.5" : 2K 2000*1200 13" : 1920*1200 12.3" : 1920*720
CP/AA	Support wired + wireless Car-play / Android AUTO
Network	4G Lte external card slot + 5G WIFI
Radio	TDA7708
Voice Control (optional)	This feature requires the purchase of voice control software
Supporting accessories (optional)	360° panoramic camera, DVR, front + rear view camera, TPMS, BT SWC, atmosphere light HUD head-up display, rear window LED screen, rear entertainment screen, thermometer, etc Note: Accessories are not included and are purchased separately.

This table provides a detailed comparison of the DUDU6 and DUDU7 models, highlighting differences in key specifications such as RAM/ROM configurations, CPU types, memory technology, GPS capabilities, microphone types, USB interfaces, power amplifiers, DSP, Bluetooth chips, audio outputs, and supported screen sizes. This helps in understanding the technological advancements of the DUDU7 model.

Support the following sizes of machines, you can choose according to your needs



The 12.3-inch screen comes in three different styles



This diagram illustrates the physical dimensions of different MekedeTech DUDUAUTO screen variants. It includes measurements for 13-inch, 11.5-inch, 10.36-inch, and 9.5-inch screens, along with three distinct styles (A, B, C) for the 12.3-inch screen, providing guidance on physical fitment.

4. SETUP AND INSTALLATION

Proper installation is crucial for the optimal performance of your DUDUAUTO DUDU7 head unit. It is recommended that installation be performed by a qualified professional.

4.1. Pre-Installation Checks

- Ensure your vehicle's electrical system is compatible with the head unit's 9V-16V operating voltage.
- Verify that the physical dimensions of the head unit fit your vehicle's double din slot.
- Disconnect the vehicle's battery before beginning installation to prevent electrical shorts.

4.2. Wiring Connections

Connect the wiring harness according to your vehicle's wiring diagram and the provided head unit's wiring instructions. Key connections include:

- **Power:** Constant 12V (Yellow), Accessory/Ignition (Red), Ground (Black).
- **Speakers:** Connect all speaker wires to the corresponding vehicle speaker wires. Ensure correct polarity.
- **Antennas:** Connect the radio antenna and the GPS antenna. Position the GPS antenna in a location with a clear view of the sky.
- **USB Ports:** Connect external USB devices as needed. The TYPE-C port supports a touch-screen convenience screen (extension cable sold separately).
- **RCA Outputs:** For external amplifiers or subwoofers, connect the RCA 5.1 Channel Outputs.
- **Optical/Coaxial Output:** For high-fidelity digital audio connections to compatible external audio processors.

4.3. Mounting the Unit

Securely mount the head unit into the vehicle's dashboard using the appropriate mounting brackets and screws. Ensure all cables are neatly routed and not pinched.

5. OPERATING INSTRUCTIONS

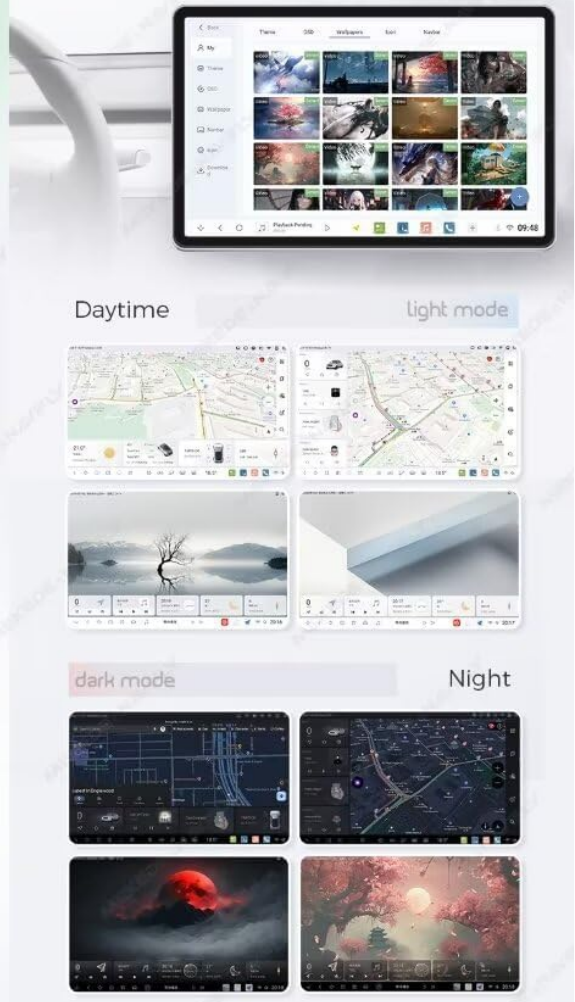
The DUDUAUTO DUDU7 operates on Android 13 with the custom DUDU OS 3.0 interface, providing an intuitive user experience.

5.1. Initial Power On and Setup

- After installation, reconnect the vehicle battery. The unit should power on automatically with the ignition.
- Follow the on-screen prompts for initial setup, including language selection, time zone, and Wi-Fi connection.
- Explore the DUDU OS 3.0 interface, which allows for customizable layouts and dynamic wallpapers.

DUDU OS 3.0

New custom dynamic wallpaper



This image showcases the DUDU OS 3.0 user interface, demonstrating its customizable layouts and dynamic wallpaper feature. It illustrates different screen configurations for navigation, media playback, and system settings, along with examples of light and dark modes for optimal visibility in varying lighting conditions.

5.2. Wireless CarPlay and Android Auto

- **For CarPlay:** On your iPhone, ensure Wi-Fi and Bluetooth are enabled. On the head unit, open the CarPlay application. Your iPhone should appear in the list of available devices. Select it to connect.
- **For Android Auto:** On your Android phone, ensure Wi-Fi and Bluetooth are enabled and Android Auto is installed. On the head unit, open the Android Auto application. Your phone should be detected. Follow the prompts to establish the connection.
- Once connected, you can use navigation, make calls, send/receive messages, and play music directly from your phone's interface displayed on the head unit.

5.3. Bluetooth Pairing

- Go to the Bluetooth settings on the head unit.
- Enable Bluetooth on your mobile device and search for available devices.
- Select the head unit (e.g., "MekedeTech DUDU7") from your device's list and confirm the pairing code if

prompted.

- Once paired, you can stream audio and make hands-free calls.

5.4. GPS Navigation

- The unit comes with pre-installed navigation capabilities. Ensure the GPS antenna is properly connected and positioned.
- Open the navigation application and follow the on-screen instructions to set your destination.
- The Dual Band GPS provides accurate and fast positioning.

5.5. Multimedia Playback

- Access various media sources including USB drives, Bluetooth audio streaming, and online streaming services via Wi-Fi.
- Utilize the built-in radio tuner for FM/AM stations.
- Adjust audio settings using the DSP features to customize your sound experience.

6. MAINTENANCE

Regular maintenance helps ensure the longevity and optimal performance of your DUDUAUTO DUDU7 head unit.

- **Screen Cleaning:** Use a soft, lint-free cloth to gently wipe the screen. For stubborn smudges, slightly dampen the cloth with water or a screen-safe cleaner. Avoid abrasive materials or harsh chemicals.
- **Software Updates:** Periodically check for software updates via the system settings. Updates can provide new features, performance improvements, and bug fixes. Connect to a stable Wi-Fi network before initiating any updates.
- **General Care:** Keep the unit free from dust and debris. Avoid exposing the unit to extreme temperatures or direct sunlight for prolonged periods when not in use.

7. TROUBLESHOOTING

If you encounter issues with your DUDUAUTO DUDU7, refer to the following common troubleshooting steps:

7.1. No Power

- **Check Fuses:** Inspect the vehicle's fuse box and the fuse on the head unit's wiring harness. Replace any blown fuses.
- **Wiring Connections:** Verify that the power (yellow), accessory (red), and ground (black) wires are securely connected and receiving proper voltage.
- **Vehicle Battery:** Ensure your vehicle's battery is charged and functioning correctly.

7.2. No Sound

- **Volume Level:** Check if the volume is turned up and not muted.
- **Speaker Connections:** Ensure all speaker wires are correctly connected to the head unit and are not short-

circuited.

- **Audio Source:** Confirm the correct audio source (e.g., Radio, USB, Bluetooth) is selected.
- **Amplifier/DSP:** If using external amplifiers or DSP, verify their power and connections.

7.3. GPS Signal Issues

- **Antenna Placement:** Ensure the GPS antenna is placed in a location with a clear, unobstructed view of the sky. Avoid placing it under metal objects.
- **Antenna Connection:** Verify the GPS antenna is securely plugged into the head unit.
- **Software:** Ensure your navigation software is up to date.

7.4. Bluetooth Connectivity Problems

- **Re-pair Device:** Delete the head unit from your phone's Bluetooth list and re-pair it.
- **Bluetooth On:** Ensure Bluetooth is enabled on both the head unit and your mobile device.
- **Interference:** Move away from other electronic devices that might cause interference.

7.5. CarPlay/Android Auto Not Connecting

- **Phone Settings:** Ensure CarPlay/Android Auto is enabled on your phone and that Wi-Fi and Bluetooth are active.
- **App Updates:** Make sure the CarPlay/Android Auto app on your phone is updated to the latest version.
- **Restart:** Try restarting both the head unit and your phone.

8. WARRANTY AND SUPPORT

For specific warranty information regarding your MekedeTech DUDUAUTO DUDU7 head unit, please refer to the warranty card included with your product or contact the seller directly. Warranty terms typically cover manufacturing defects for a specified period from the date of purchase.

For technical support, troubleshooting assistance beyond this manual, or inquiries about replacement parts, please contact MekedeTech customer service or visit the official MekedeTech store page:

[Visit the MekedeTech Store on Amazon](#)

When contacting support, please have your product model number (DUDU7-12.3inch-12+256GB) and purchase details readily available.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question