



[Manuals.plus](#) /

> [Audiopipe](#) /

> Audiopipe ADSP-Clean-APP Digital Signal Processor User Manual

Audiopipe ADSP-CLEAN-APP

Audiopipe ADSP-Clean-APP Digital Signal Processor User Manual

Model: ADSP-CLEAN-APP

1. INTRODUCTION

The Audiopipe ADSP-Clean-APP is a sophisticated Digital Signal Processor (DSP) designed to enhance and customize the audio output of your sound system. It offers precise control over various audio parameters, allowing for optimized sound quality and application-specific tuning. This manual provides detailed instructions for the installation, operation, and maintenance of your ADSP-Clean-APP unit.

2. SAFETY INFORMATION

Please read all safety instructions carefully before installing and operating this device. Failure to follow these guidelines may result in injury or damage to the unit or vehicle.

- Ensure the vehicle's battery is disconnected before making any electrical connections.
- Install the unit in a dry, well-ventilated location away from direct sunlight, heat sources, and moisture.
- Use appropriate gauge wiring for power and ground connections to prevent overheating and electrical hazards.
- Do not open the unit's casing. Refer all servicing to qualified personnel.
- Securely mount the DSP to prevent movement during vehicle operation.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- Audiopipe ADSP-Clean-APP Digital Signal Processor Unit
- Power/Ground/Remote Wiring Harness
- Mounting Screws and Washers
- User Manual (this document)



Image: Power/Ground/Remote Wiring Harness. This image displays the included wiring harness with red wires and a black connector, essential for connecting the DSP to the vehicle's power, ground, and remote turn-on signal.



Image: Mounting Screws and Washers. A clear plastic bag containing black mounting screws and washers, used for securing the DSP unit in place.

4. PRODUCT OVERVIEW

Familiarize yourself with the components and connections of your ADSP-Clean-APP unit.

4.1 Front Panel



Image: Audiopipe ADSP-Clean-APP Front Panel. This image shows the top view of the DSP unit, featuring the LCD screen, control knob, 'App Connection' indicator, 'Hot Key' buttons, 'Limiter' indicators, and input/output RCA connections.

- **LCD Screen:** Displays current settings and menu options.
- **Control Knob:** Used for navigating menus and adjusting parameters. Press to select.
- **App Connection Indicator:** Lights up when connected to the mobile application via Bluetooth.
- **Hot Key Buttons (1-4):** Programmable buttons for quick access to specific functions or presets.
- **Limiter Indicators:** Show when the audio signal is approaching or reaching its limit.
- **Input (A/B) RCA:** Audio input connections.
- **Output (1-4 L/R) RCA:** Audio output connections to amplifiers.
- **Power/Remote/Ground Terminal:** Screw terminals for power, remote turn-on, and ground connections.

4.2 Rear Panel (RCA Outputs)



Image: Audiopipe ADSP-Clean-APP Rear Panel RCA Outputs. This view shows the array of RCA output jacks (OUT 1 L/R, OUT 2 L/R, OUT 3 L/R, OUT 4 L/R) on the rear of the unit, used for connecting to external amplifiers.

4.3 Side Panel (Power Connector)



Image: Audiopipe ADSP-Clean-APP Side Panel Power Connector. This image highlights the 3-pin connector port on the side of the DSP unit, where the power/ground/remote wiring harness is inserted.

5. SETUP AND INSTALLATION

Proper installation is crucial for optimal performance and safety. If you are unsure about any steps, consult a professional installer.

5.1 Mounting the Unit

1. Choose a secure, dry, and well-ventilated location for mounting the DSP. Avoid areas exposed to extreme temperatures or moisture.
2. Use the provided mounting screws and washers to firmly attach the unit to a stable surface. Ensure there is adequate space around the unit for ventilation and cable connections.

5.2 Wiring Connections

Before making any connections, ensure the vehicle's battery negative terminal is disconnected.

1. **Power (BATT+):** Connect the red wire from the wiring harness to a fused constant 12V power source from the vehicle's battery. Use an appropriate fuse (not included, typically 15-20A) as close to the battery as possible.
2. **Ground (GND):** Connect the black wire from the wiring harness to a clean, bare metal chassis ground point in the vehicle. Ensure a solid connection to prevent noise.
3. **Remote (REM):** Connect the blue wire from the wiring harness to the remote turn-on output of your head unit or ignition switch. This will turn the DSP on and off with your audio system.
4. **Audio Input:** Connect your head unit's RCA outputs to the DSP's INPUT A or B RCA jacks.
5. **Audio Output:** Connect the DSP's OUTPUT 1-4 L/R RCA jacks to the corresponding inputs on your amplifiers.



Image: Power/Ground/Remote Wiring Harness. This image shows the 3-pin wiring harness with labeled terminals for BATT+, REM, and GND, which connects to the DSP unit.

6. OPERATING THE ADSP-CLEAN-APP

The ADSP-Clean-APP can be controlled via its built-in knob and LCD screen or through the dedicated mobile application.

6.1 Using the Built-in Controls

- **Power On:** Once properly wired, the unit will power on when the remote turn-on signal is received.
- **Navigation:** Rotate the control knob to scroll through menu options.
- **Selection/Adjustment:** Press the control knob to select an option or confirm an adjustment. Rotate the knob to change values.
- **Master Mute:** Pressing a specific button (refer to unit markings) can activate the master mute function.
- **Battery Voltage Display:** The unit can display real-time battery voltage at the push of a button.

6.2 Mobile Application Control

For advanced control and customization, download the Audiopipe DSP Mobile Application on your iOS or Android device.

1. **Download the App:** Search for "Audiopipe DSP" in the Apple App Store (for iOS) or Google Play Store (for Android).

2. **Connect via Bluetooth:** Ensure Bluetooth is enabled on your mobile device. Open the Audiopipe DSP app and follow the on-screen instructions to connect to your ADSP-Clean-APP unit. The 'App Connection' indicator on the DSP will illuminate upon successful connection.
3. **App Features:** The application provides comprehensive control over the DSP's functions, including:
 - **Level Control:** Adjust input and output levels.
 - **Graphic Equalizer (12-Band):** Fine-tune frequency response.
 - **Parametric Equalizer:** Precise control over specific frequency bands.
 - **Crossover:** Define cutoff and attenuation frequencies for each output channel.
 - **Routing:** Configure signal paths for inputs and outputs.
 - **Limiter:** Prevent signal clipping and protect speakers.
 - **Delay:** Adjust time alignment for individual channels.
 - **Phase:** Invert the phase of audio signals.
 - **Tone Generator:** Generate test tones for system tuning.
 - **Presets:** Save and recall custom audio settings.



Image: Audiopipe DSP Mobile Application Interface. This image displays a smartphone screen showing the Audiopipe DSP app interface with various control icons such as Level, Graphic EQ, Parametric EQ, Crossover, Routing, Limiter, Delay, Phase, Settings, and Help.

7. MAINTENANCE

The ADSP-Clean-APP requires minimal maintenance. Follow these guidelines to ensure longevity:

- Keep the unit clean by wiping it with a soft, dry cloth. Do not use harsh chemicals or abrasive cleaners.
- Ensure all connections remain secure. Periodically check wiring for any signs of wear or corrosion.
- Maintain proper ventilation around the unit to prevent overheating.

8. TROUBLESHOOTING

If you encounter issues with your ADSP-Clean-APP, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
No Power	Loose power/ground/remote connection; Blown fuse; Faulty remote signal.	Check all wiring connections. Verify fuse integrity. Ensure head unit's remote output is active.
No Audio Output	Incorrect input/output connections; DSP settings (e.g., mute, low levels); Amplifier issue.	Verify RCA connections. Check DSP's master mute and output levels. Confirm amplifier is powered on and functioning.
Bluetooth Connectivity Issues	Bluetooth not enabled on device; App not recognizing DSP; Interference.	Ensure Bluetooth is active on your phone. Restart the app and DSP. Try pairing again. Move closer to the DSP.
Distorted Sound / Clipping	Input/output levels too high; Improper gain staging; Faulty wiring.	Reduce input/output levels on the DSP and connected components. Check for damaged wiring. Utilize the Limiter function.

If the problem persists after attempting these solutions, please contact Audiopipe customer support.

9. SPECIFICATIONS

Feature	Detail
Model Number	ADSP-CLEAN-APP
Item Weight	1.56 pounds
Product Dimensions	9 x 7 x 3 inches
Input/Output Processing	Yes
Graphic Equalizer	12 Band
Tone Generator	Yes
Mobile Application Control	iOS and Android via Bluetooth
Real-time Battery Voltage Display	Yes

Feature	Detail
Master Mute Function	Yes

10. WARRANTY INFORMATION

The Audiopipe ADSP-Clean-APP Digital Signal Processor comes with a **1 Year Manufacturer Warranty**. This warranty covers defects in materials and workmanship under normal use. It does not cover damage resulting from improper installation, accident, misuse, abuse, neglect, unauthorized modification, or normal wear and tear. Please retain your proof of purchase for warranty claims.

11. CUSTOMER SUPPORT

For technical assistance, troubleshooting beyond this manual, or warranty inquiries, please contact Audiopipe customer support. Refer to the official Audiopipe website for the most current contact information.

Audiopipe Official Website: www.audiopipe.com