

Audiopipe APEL-1400.4

Audiopipe APEL-1400.4 4-Channel Mosfet Stereo Audio Amplifier User Manual

Model: APEL-1400.4

1. INTRODUCTION AND SAFETY INFORMATION

This manual provides essential instructions for the proper installation, operation, and maintenance of your Audiopipe APEL-1400.4 4-Channel Mosfet Stereo Audio Amplifier. Please read this manual thoroughly before attempting installation or operation to ensure optimal performance and prevent damage.

1.1 Important Safety Precautions

- **Professional Installation Recommended:** Installation of car audio equipment can be complex. If you are unsure about any aspect of the installation, consult a qualified professional.
- **Power Disconnection:** Always disconnect the vehicle's negative battery terminal before starting any electrical work to prevent short circuits and electrical shock.
- **Proper Wiring:** Use appropriate gauge wiring for power, ground, and speaker connections as specified in this manual. Incorrect wiring can lead to overheating, fire, or equipment failure.
- **Fusing:** Ensure the amplifier is properly fused at the battery and at the amplifier itself. Do not use fuses with higher ratings than specified.
- **Ventilation:** Install the amplifier in a location that allows for adequate air circulation to prevent overheating. Avoid mounting in enclosed spaces without ventilation.
- **Moisture and Heat:** Keep the amplifier away from moisture, water, and excessive heat sources.
- **Secure Mounting:** Mount the amplifier securely to prevent it from coming loose during vehicle movement, which could cause injury or damage.

2. PRODUCT OVERVIEW AND PACKAGE CONTENTS

The Audiopipe APEL-1400.4 is a high-performance 4-channel Mosfet stereo audio amplifier designed to enhance your vehicle's audio system. It delivers 1400 watts of power, providing clear and dynamic sound reproduction.



Figure 2.1: Front view of the Audiopipe APEL-1400.4 amplifier, showing the brand logo and model number.

2.1 Key Features

- 1400 Watts Max Power Output
- 4-Channel Configuration
- Mosfet Power Supply
- Variable Low Pass Filter (LPF)
- Variable High Pass Filter (HPF)
- Bass Boost Control
- Remote Bass Knob Included
- Cooling Fan for Thermal Management

2.2 Package Contents

Verify that all items are present in the package:

- Audiopipe APEL-1400.4 4-Channel Amplifier
- Remote Bass Knob with Cable
- Mounting Hardware (screws)
- User Manual (this document)



Figure 2.2: The included remote bass knob, allowing convenient adjustment of bass levels.

3. SETUP AND INSTALLATION

Careful installation is crucial for the performance and longevity of your amplifier. Follow these steps for proper setup.

3.1 Choosing a Mounting Location

Select a location that:

- Provides adequate ventilation for cooling.

- Is protected from moisture and direct sunlight.
- Allows for short wiring runs to the battery and speakers.
- Is secure and will not interfere with vehicle operation or passenger safety.

3.2 Wiring Connections

Refer to the diagram below for proper wiring of power, ground, remote, and speaker connections.



Figure 3.1: Rear panel of the amplifier showing power, ground, remote, fuse, and speaker output terminals.

1. **Power Connection (+12V):** Run a heavy gauge power cable (e.g., 4 AWG or 8 AWG depending on total system power) directly from the positive terminal of the vehicle's battery to the +12V terminal on the amplifier. Install an in-line fuse holder within 18 inches (45 cm) of the battery, using a fuse rated appropriately for the amplifier (e.g., 2 x 25A fuses as indicated on the unit).
2. **Ground Connection (GND):** Run a heavy gauge ground cable of the same size as the power cable from the GND terminal on the amplifier to a clean, unpainted metal surface on the vehicle's chassis. Ensure a good electrical

connection by scraping away any paint or rust. The ground cable should be as short as possible.

3. **Remote Turn-On (REM):** Connect a smaller gauge wire (e.g., 18 AWG) from the REM terminal on the amplifier to the remote turn-on output of your head unit. This wire tells the amplifier to turn on when your head unit is active.
4. **Speaker Connections:** Connect your speakers to the 'FRONT' and 'REAR' speaker output terminals. Ensure correct polarity (+ to + and - to -) for each speaker. The amplifier supports both stereo and bridged configurations. Refer to your speaker's impedance rating and the amplifier's specifications for compatible loads.
5. **RCA Input Connections:** Connect RCA cables from your head unit's pre-amp outputs to the 'INPUTS' on the amplifier. Use the 'LEFT' and 'RIGHT' inputs for both front and rear channels.
6. **Remote Bass Knob:** Connect the remote bass knob cable to the designated port on the amplifier.

4. OPERATING INSTRUCTIONS AND CONTROLS

Once the amplifier is correctly installed, you can power it on and adjust its settings for optimal audio performance.

4.1 Initial Power-Up

1. Double-check all wiring connections for security and correct polarity.
2. Reconnect the vehicle's negative battery terminal.
3. Turn on your vehicle's ignition and head unit. The amplifier should power on, indicated by an LED indicator (if present).

4.2 Controls and Adjustments

The amplifier features several controls to fine-tune your audio system:

- **Input Level (Gain):** This control matches the amplifier's input sensitivity to the output level of your head unit. Start with the gain set to minimum and slowly increase it until you achieve a clear, undistorted sound at your desired maximum volume. Avoid setting the gain too high, as this can cause distortion and damage to speakers.
- **High Pass Filter (HPF):** This filter allows frequencies above the set point to pass through to the speakers, blocking lower frequencies. Useful for protecting smaller speakers from damaging bass frequencies. Adjustable from 50Hz to 5kHz.
- **Low Pass Filter (LPF):** This filter allows frequencies below the set point to pass through, blocking higher frequencies. Typically used for subwoofers. Adjustable from 40Hz to 250Hz.
- **Bass Boost:** This control provides an adjustable boost to bass frequencies, typically around 0-12dB. Use sparingly to avoid distortion.
- **Remote Bass Knob:** Allows for convenient adjustment of the bass level from the driver's seat.

5. MAINTENANCE

Regular maintenance helps ensure the longevity and performance of your amplifier.

- **Cleaning:** Periodically clean the amplifier's exterior with a soft, dry cloth. Do not use harsh chemicals or abrasive cleaners. Ensure ventilation fins are free of dust and debris.
- **Connection Checks:** Annually, inspect all power, ground, remote, and speaker connections to ensure they are secure and free from corrosion. Loose connections can lead to poor performance or damage.
- **Fuse Replacement:** If a fuse blows, replace it only with a fuse of the exact same type and rating. Using an incorrect fuse can lead to serious damage or fire.

6. TROUBLESHOOTING

If you experience issues with your amplifier, consult this section before seeking professional service.

Problem	Possible Cause	Solution
Amplifier does not turn on (no power LED)	Blown fuse (in-line or on amplifier) Loose or incorrect power/ground/remote wiring Faulty remote turn-on signal	Check and replace fuses if necessary. Verify all power, ground, and remote connections are secure and correctly wired. Test remote wire for +12V when head unit is on.
No sound output	Loose or incorrect RCA input connections Loose or incorrect speaker wiring Amplifier in protection mode Head unit volume too low or muted	Check RCA cables for secure connection and proper channel assignment. Verify speaker wires are connected correctly and not shorted. Turn off amplifier, check for shorts, and restart. Increase head unit volume.
Distorted sound	Gain set too high Speaker impedance mismatch Damaged speakers or wiring	Reduce the gain setting. Ensure speaker impedance is within amplifier's specifications. Inspect speakers and wiring for damage.
Amplifier overheats (protection mode)	Insufficient ventilation Speaker impedance too low Prolonged high-volume operation	Ensure adequate airflow around the amplifier. Verify speaker impedance is correct. Reduce volume or allow amplifier to cool down.

7. SPECIFICATIONS

The following are the technical specifications for the Audiopipe APEL-1400.4 amplifier:

MASTER CARTON: 5/1/1
 UPC: 784644418154
 PRODUCT SECTION: AUDIOPIPE
 SUBSECTION: AMPLIFIER
 GIFTBOX SIZE: 15" X 11.25" X 4"

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APEL-1400.4

4 Channel Mosfet A/B Amplifier



With Cooling Fan and Remote Bass Knob



SPECIFICATIONS

- Input Level: 0.2 ~ 5V
- Frequency Response: 40Hz ~ 5kHz
- HPF: 50Hz ~ 5kHz
- LPF: 40Hz ~ 250Hz
- THD: ≤0.5%
- Bass Boost Level: 0 ~ 12dB
- Signal Noise Ratio: >80dB
- Current Draw: 46A
- Minimum Load: 2 Ohm
- PCB: Single Side Board
- Dimensions (W x H x D): 9.25 x 2 x 11.5"



1400 WATTS

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Figure 7.1: Detailed graphic displaying the specifications and features of the APEL-1400.4 amplifier.

Feature	Specification
Output Power	1400 Watts (Max)
Number of Channels	4
Input Level	0.2V ~ 5V
Frequency Response	40Hz ~ 5kHz
High Pass Filter (HPF)	50Hz ~ 5kHz
Low Pass Filter (LPF)	40Hz ~ 250Hz
Total Harmonic Distortion (THD)	<0.5%

Feature	Specification
Bass Boost Level	0 ~ 12dB
Signal to Noise Ratio	>80dB
Current Draw	46A
Minimum Load	2 Ohm
PCB Type	Single Side Board
Dimensions (W x H x D)	9.25" x 2" x 11.5"
Item Weight	6.71 pounds
Model Number	APEL-1400.4
UPC	784644418154

8. WARRANTY AND SUPPORT

Audiopipe products are designed for reliability and performance. For specific warranty information, please refer to the warranty card included with your product or visit the official Audiopipe website. Keep your purchase receipt as proof of purchase for any warranty claims.

8.1 Customer Support

If you encounter any issues not covered in this manual or require further assistance, please contact Audiopipe customer support. Contact information can typically be found on the product packaging or the official Audiopipe website.

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