PAC AP4-GM61

PAC AmpPRO 4 AP4-GM61 Amplifier Integration Interface User Manual

For Select 2014-2019 GM Vehicles with Factory-Amplified Bose Sound Systems

1. INTRODUCTION

The PAC AmpPRO 4 AP4-GM61 is an amplifier integration interface designed to simplify the installation of aftermarket amplifiers in specific 2014-2019 GM vehicles equipped with factory-amplified Bose sound systems. This module allows for the retention of the original radio's functionality and vehicle features while enabling an upgrade to the audio system's performance. It maintains audio from factory Bluetooth, navigation, safety systems, and warning chimes.

2. PRODUCT FEATURES

- Upgrade solution for factory, fixed-level, databus-controlled sound systems.
- Retains original radio's fit, finish, and features.
- Maintains audio from factory Bluetooth, navigation, safety systems, and all warning chimes.
- Provides variable volume, fade, balance, bass, mid, and treble audio settings.
- Includes a sub-level controller and optical output.
- Time-saving design, eliminating the need for summing and audio correction devices.
- Features a 2A remote turn-on lead for amplifiers.
- Dedicated non-fading subwoofer channel.
- TOSLINK digital output for connection to a Digital Signal Processor (DSP).
- 5V pre-outs, adjustable to 4V.
- USB interface for PC application with configuration options.
- Adjustable chime volume.

3. COMPATIBILITY

The PAC AmpPRO 4 AP4-GM61 is compatible with the following GM vehicles equipped with factory-amplified Bose sound systems:

- **Cadillac:** ATS (2015-2016), CT6 (2017), Escalade (2015-2019)
- **Chevrolet:** Camaro (2016-2018), Colorado (2015-2018), Corvette (2014-2019), Cruze (2017-2018), Equinox (2018), Impala (2017-2019), Impala Non-Classic (2014-2016), Malibu (2017-2018), Malibu Non-Classic (2016), Silverado (2014-2018), Silverado Classic (2019), Silverado HD (2015-2019), Suburban (2015-2019), Tahoe (2015-2019), Traverse (2018-2019), Volt (2016-2018)
- **GMC:** Acadia (2018-2019), Canyon (2015-2018), Sierra (2014-2018), Sierra HD (2015-2019), Terrain (2018), Yukon (2015-2019), Yukon XL (2015-2019)

Note: Vehicle compatibility may vary. Always verify your vehicle's specific audio system configuration before installation.

4. PACKAGE CONTENTS

The PAC AmpPRO 4 AP4-GM61 package typically includes:

- PAC AmpPRO 4 AP4-GM61 Interface Module
- Wiring Harnesses (T-harness for vehicle integration, RCA outputs)
- CMX Chime Module
- Sub-level Controller (Bass Knob)
- USB Cable (for firmware updates and configuration)

Image 1: Components of a PAC interface kit. This image displays a central blue interface module labeled 'RadioPRO RP5-GM11', along with multiple wiring harnesses featuring various connectors (including RCA outputs), and a small black CMX chime module. While this image shows a similar PAC product, this manual specifically details the PAC AmpPRO 4 AP4-GM61 amplifier integration interface.

5. SETUP AND INSTALLATION

Installation of the PAC AmpPRO 4 AP4-GM61 involves integrating the module into your vehicle's existing audio system. Due to the complexity of modern vehicle electronics, professional installation is highly recommended. This section provides a general overview; always refer to the detailed installation guide provided with your product for specific vehicle wiring diagrams and steps.

5.1 General Installation Steps

1. **Vehicle Disassembly:** Carefully remove necessary trim panels and the factory radio to access the factory amplifier.
2. **Locate Factory Amplifier:** Identify and access the factory amplifier, typically located behind the radio, under a seat, or in the trunk.
3. **Disconnect Factory Harness:** Disconnect the main wiring harness from the factory amplifier.
4. **Connect T-Harness:** Connect the provided PAC T-harness in-line with the factory amplifier harness. The T-harness will connect to both the factory amplifier and the AmpPRO module.
5. **Connect AmpPRO Module:** Connect the AmpPRO 4 AP4-GM61 module to the T-harness.
6. **Connect RCA Outputs:** Connect the RCA output cables from the AmpPRO module to your aftermarket amplifier(s).
7. **Connect Remote Turn-On:** Utilize the 2A remote turn-on lead from the AmpPRO module to power on your aftermarket amplifier(s).
8. **Connect Chime Module:** Connect the CMX chime module as per the detailed instructions.
9. **Power Up and Test:** Reconnect the vehicle's battery, power on the radio, and test all audio functions, including volume, fade, balance, and chimes.
10. **Configuration (Optional):** Use the PAC PC application via USB to fine-tune settings and update firmware if necessary.

Important: Ensure all connections are secure to prevent intermittent issues or damage to components. Disconnect the vehicle's battery before beginning installation.

6. OPERATING INSTRUCTIONS

Once installed, the AmpPRO 4 AP4-GM61 operates seamlessly with your factory radio. Most audio adjustments will be made through your aftermarket amplifier(s) and any connected Digital Signal Processor (DSP).

6.1 Audio Adjustments

- **Volume, Fade, Balance:** These functions are typically controlled via the factory radio. The AmpPRO module processes these signals for your aftermarket amplifiers.
- **Bass, Mid, Treble:** Initial adjustments can be made through the factory radio. Further fine-tuning should be done on your aftermarket amplifier(s) or DSP for optimal sound quality.
- **Subwoofer Level:** Use the included sub-level controller (bass knob) to adjust the output of the dedicated subwoofer channel.
- **Chime Volume:** The chime module allows for adjustment of warning chime volume, preventing excessively loud or quiet alerts. Refer to the specific instructions for the chime module for adjustment procedures.

6.2 Firmware Updates and Configuration

The AmpPRO module can be connected to a computer via USB for firmware updates and advanced configuration using the PAC PC application. This allows for customization of settings and ensures the module is running the latest software for optimal performance and compatibility.

7. Maintenance

The PAC AmpPRO 4 AP4-GM61 is designed for long-term, maintenance-free operation. No regular user maintenance is required. Ensure the module is installed in a dry, secure location away from extreme temperatures and moisture. Periodically check wiring connections for security, especially after initial installation or if any audio issues arise.

8. Troubleshooting

If you encounter issues with your AmpPRO 4 AP4-GM61, review the following common problems and solutions:

- **No Sound Output:**

    - Verify all wiring connections, especially the T-harness and RCA outputs, are secure.
    - Ensure the aftermarket amplifier(s) are receiving power and a remote turn-on signal.
    - Check the factory radio's settings and ensure it is powered on and playing audio.
    - Confirm the AmpPRO module is receiving power (check ACCY on LED).
    - If using the PC application, verify output settings are correct.
    - Consider a firmware update if available, as some issues can be resolved with updated software.

- **Popping Noises / White Noise:**

    - Ensure all ground connections are clean and secure.
    - Check for proper shielding of RCA cables.
    - Verify the AmpPRO module's firmware is up to date.
    - Adjust gain settings on aftermarket amplifiers to prevent over-driving the signal.

- **Module Shuts Off Randomly / Inconsistent Wake-Up:**

    - Ensure the module is receiving consistent power and ground.
    - Verify the vehicle's data bus is properly communicating with the module.
    - Check for loose connections in the T-harness.
    - Allow the vehicle's BCM (Body Control Module) to fully go to sleep before restarting if issues persist.
    - A firmware update may address communication stability issues.

- **Remote Wire Not Turning Off Amplifiers:**

    - Confirm the remote turn-on lead from the AmpPRO module is correctly wired to the aftermarket amplifier(s).
    - Ensure the AmpPRO module is powering down correctly with the vehicle's ignition.
    - If the issue persists, consider using an alternative switched 12V source for the amplifier remote turn-on, though this bypasses the module's intended function.

- **Warning Chimes / Alerts Too Low:**

    - Adjust the chime volume using the CMX chime module as per its specific instructions.

- Ensure the chime module is correctly connected and functioning.

If troubleshooting steps do not resolve the issue, contact PAC technical support or a qualified car audio installer for assistance.

9. SPECIFICATIONS

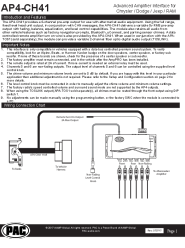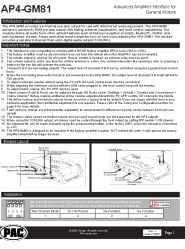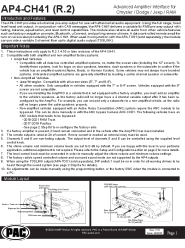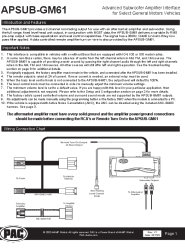| Attribute	Detail
Brand	PAC
Model	AP4-GM61
Item Weight	13.1 ounces
Product Dimensions	8.5 x 5.75 x 2.15 inches
Manufacturer Part Number	AP4-GM61
First Available Date	March 3, 2018

10. WARRANTY AND SUPPORT

For warranty information, please refer to the documentation included with your PAC AmpPRO 4 AP4-GM61 or visit the official PAC Audio website. For technical support, installation assistance, or troubleshooting beyond this manual, please contact PAC Audio customer service directly. Contact information can typically be found on the product packaging or their official website.

It is recommended to register your product upon purchase to facilitate any warranty claims or support requests.

Related Documents - AP4-GM61

[AP4-GM61 Radio Module Location Guide | PAC AmpPRO 4 for GM Vehicles](#)
Detailed guide to locating the AP4-GM61 radio module for installation in select 2014-2019 GM vehicles with factory-amplified Bose sound systems. This PAC AmpPRO 4 technical bulletin covers vehicle-specific locations for models like Silverado, Camaro, Corvette, and more, aiding car audio installers.

[PAC AP4-GM61 Advanced Amplifier Interface for General Motors | Installation & Setup Guide](#)

Comprehensive guide for the PAC AP4-GM61 Advanced Amplifier Interface for General Motors. Learn about installation, setup, configuration, PC app usage, firmware updates, and troubleshooting.

[PAC AP4-CH41 Advanced Amplifier Interface for Chrysler/Dodge/Jeep/RAM - Installation and Setup Guide](#)

Comprehensive guide for the PAC AP4-CH41 Advanced Amplifier Interface, detailing installation, setup, configuration, troubleshooting, and PC app usage for Chrysler, Dodge, Jeep, and RAM vehicles. This interface provides 6-channel pre-amp output and retains factory audio features.

[AP4-GM81 Advanced Amplifier Interface for General Motors Installation and Setup Guide](#)

This guide provides detailed instructions for installing and configuring the AP4-GM81 Advanced Amplifier Interface for General Motors vehicles equipped with BOSE factory amplifiers. Learn about features, wiring, DIP switch settings, minimum volume adjustment, chime volume control, EQ settings, and troubleshooting.

[PAC AP4-CH41 (R.2) Advanced Amplifier Interface Installation and Configuration Guide](#)

Detailed guide for installing and configuring the PAC AP4-CH41 (R.2) Advanced Amplifier Interface for Chrysler, Dodge, Jeep, and RAM vehicles. Covers features, installation steps, setup, PC app usage, and troubleshooting.

[PAC APSUB-GM61 Advanced Subwoofer Amplifier Interface for Select General Motors Vehicles - Installation and User Guide](#)

Comprehensive guide for the PAC APSUB-GM61 Advanced Subwoofer Amplifier Interface. Covers installation, setup, configuration, ANC bypass, AmpPRO PC app usage, firmware updates, and troubleshooting for select General Motors vehicles.