

PAC RP5-GM31

PAC RadioPRO5 RP5-GM31 Radio Replacement Interface User Manual

Model: RP5-GM31

1. INTRODUCTION

The PAC RadioPRO5 RP5-GM31 is an advanced radio replacement interface designed for select GM vehicles. This interface facilitates the installation of an aftermarket radio while retaining essential factory features such as OnStar, steering wheel controls, and amplifier functionality. It integrates seamlessly with your vehicle's existing systems, providing a comprehensive solution for audio system upgrades.

2. KEY FEATURES

- All-in-one radio replacement and steering wheel control interface.
- Preloaded with amplifier retention and Steering Wheel Control (SWC) software.
- Compatible with both amplified and non-amplified audio systems.
- Retains OnStar and its functions when the factory radio is replaced.
- Retains pre-programmed steering wheel controls.
- Retains factory Bluetooth (for 2009+ model vehicles).
- Retains rear seat audio controls.
- Retains factory satellite radio with text displayed in the Driver Information Center (cluster display).
- Retains all warning chimes (chime module included).
- Retains back-up sensors/park assist and back-up camera signal.
- Supports factory Bose and premium Bose audio systems (note: Y91 digital system does not support fading from aftermarket radio).
- Dual-zone function and chime volume adjustment.
- Retains accessory power output (RAP), Vehicle Speed Sense (VSS) output, illumination output, parking brake output, and reverse wire output.
- In-field updateable using a PAC-UP USB adapter (sold separately).

The following image illustrates the features retained by RadioPRO interfaces, including the RP5-GM31:

RadioPRO

Radio Replacement Interface



Retains OnStar or Other Telematics	●		
Antenna Adapter Included	●		
Retains Rear Seat Entertainment and Controls	●		
RadioPRO LINK Ready	●	●	
Retains Steering Wheel Controls	●	●	
Navigation Radio Ready	●	●	●
Retains Factory Amplifier	●	●	●
10 amp Accessory 12 volt Output	●	●	●
In-field Updateable	●	●	●

This image displays a feature comparison for RadioPRO 5, 4, and 3 series interfaces. For the RadioPRO 5 (RP5-GM31), it confirms retention of OnStar or other telematics, an antenna adapter is included, retention of rear seat entertainment and controls, RadioPRO LINK readiness, retention of steering wheel controls, navigation radio readiness, retention of factory amplifier, 10 amp accessory 12 volt output, and in-field updateability.

3. COMPATIBILITY NOTES

- **2012 through 2014 Avalanche, Sierra, Silverado, Suburban, Tahoe, and Yukon:** Vehicles equipped with a navigation radio are not compatible.
- **2014+ Silverado and Sierra:** Only compatible with 2500 and 3500 series trucks with non-navigation radios.
- Rear seat audio and video (GMRVD) required for dual-zone function (sold separately).

4. SETUP AND INSTALLATION

Installation of the PAC RadioPRO5 RP5-GM31 requires technical knowledge of automotive electrical systems and audio equipment. It is highly recommended that installation be performed by a certified professional to ensure proper functionality and to avoid damage to the vehicle or the interface.

General Installation Steps:

1. **Vehicle Disassembly:** Carefully remove the factory radio and associated trim panels.
2. **Wiring Connections:** Connect the RP5-GM31 harness to the vehicle's wiring and the aftermarket

radio's harness according to the detailed wiring diagram provided with the product. Ensure all connections are secure and properly insulated.

3. **Module Placement:** Securely mount the RP5-GM31 module in a suitable location behind the dashboard, away from heat sources and moving parts.
4. **Testing:** Before reassembling the dashboard, test all functions of the aftermarket radio and retained factory features (OnStar, steering wheel controls, chimes, etc.).
5. **Reassembly:** Reinstall all trim panels and the aftermarket radio.

Refer to the detailed installation guide included in the product packaging for specific wiring diagrams and vehicle-specific instructions.

5. OPERATING INSTRUCTIONS

Once installed, the PAC RadioPRO5 RP5-GM31 operates automatically to integrate your aftermarket radio with your vehicle's systems. No direct user interaction with the module is typically required for daily operation.

Key Operational Aspects:

- **Steering Wheel Controls:** Your factory steering wheel controls will function with your new aftermarket radio. These controls are pre-programmed for common functions like volume, track change, and mode selection. Refer to your aftermarket radio's manual for specific button assignments if customization is desired.
- **OnStar Retention:** OnStar services will continue to function as they did with the factory radio.
- **Warning Chimes:** All factory warning chimes will be retained and audible through the vehicle's audio system. Chime volume can be adjusted.
- **Rear Seat Audio/Video:** If equipped and with the GMRVD accessory, rear seat audio and video functions will be retained.

6. MAINTENANCE

The RP5-GM31 is designed for reliable, long-term operation with minimal maintenance. The primary maintenance consideration is firmware updates.

Firmware Updates:

The interface is "in-field updateable" using a PAC-UP USB adapter (sold separately). Firmware updates may be released to improve compatibility, add features, or address specific issues. Visit the PAC website for information on available updates and instructions on how to perform them.

7. TROUBLESHOOTING

If you experience issues after installation, consider the following troubleshooting steps:

- **No Power to Radio:** Check all power connections to the RP5-GM31 module and the aftermarket radio. Ensure the vehicle's ignition is on.
- **Steering Wheel Controls Not Working:** Verify that the SWC wire from the RP5-GM31 is correctly connected to the aftermarket radio. Ensure the radio's SWC settings are configured correctly.
- **No Chimes/OnStar Audio:** Confirm the chime module is properly connected. Check all audio output connections from the RP5-GM31.
- **Sound Issues (e.g., no fade with Bose Y91):** Review compatibility notes. Some factory systems

have limitations with aftermarket radios.

- **Intermittent Functionality:** Recheck all wiring connections for looseness or poor contact.

If problems persist, consult the detailed troubleshooting section in the full product manual or contact PAC technical support.

8. SPECIFICATIONS

Brand	PAC
Model Name	RP5-GM31
Model Number	RP5-GM31
Special Feature	Universal compatibility for specified GM vehicles
Color	Blue
Compatible Devices	Rear view camera, Vehicle-side video entertainment system
Connectivity Technology	Bluetooth (retained factory Bluetooth)
Controller Type	Button Control (for retained steering wheel controls)
Item Weight	0.5 Pounds
Built-In Media	Antenna Adapter
UPC	606523109246

9. WARRANTY INFORMATION

The PAC RadioPRO5 RP5-GM31 comes with a **5-year warranty**. Please retain your proof of purchase for warranty claims. The 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 acts of nature.

For detailed warranty terms and conditions, please refer to the documentation included with your product or visit the official PAC website.

10. TECHNICAL SUPPORT

For technical assistance, installation questions, or troubleshooting support, please contact PAC customer service or visit their official website. Have your product model number (RP5-GM31) and vehicle information ready when contacting support.

PAC Official Website: www.pac-audio.com

Note: This manual provides general information. Always refer to the specific installation instructions included with your product for detailed, vehicle-specific guidance.