

PLINIUS EQ-70

PLINIUS EQ-70 7-Band Car Audio Equalizer Instruction Manual

Model: EQ-70

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your PLINIUS EQ-70 7-Band Car Audio Equalizer. Please read this manual thoroughly before attempting to install or operate the unit to ensure proper function and to prevent damage.

The PLINIUS EQ-70 is a 7-band stereo equalizer and pre-amplifier designed to enhance your car audio system. It features adjustable active gain, a 30V bi-polar switching power supply, adjustable subwoofer frequency, and multiple RCA outputs for controlling various amplifiers.

2. SAFETY INFORMATION

- Always disconnect the vehicle's battery negative terminal before installation to prevent electrical shorts.
- Ensure all wiring is properly insulated to prevent short circuits.
- Mount the equalizer securely to avoid movement during vehicle operation.
- Do not operate the unit in wet conditions or expose it to excessive moisture.
- Avoid placing the unit in direct sunlight or near heat sources.
- Consult a professional car audio installer if you are unsure about any installation steps.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- EQ-70 host unit
- Power plug
- Installation firmware (if applicable)

- Mounting screws

4. PRODUCT OVERVIEW

4.1 Front Panel Controls

The front panel of the EQ-70 features various controls for audio adjustment.



Figure 1: Front angled view of the PLINIUS EQ-70 equalizer, showing the control knobs and input selection switch.



Figure 2: Labeled diagram of the PLINIUS EQ-70 front panel controls.

1. **VOL (Volume Control):** Adjusts the overall output volume of the equalizer.
2. **SUB VOL (Subwoofer Volume Control):** Adjusts the output level of the subwoofer channel independently.
3. **SUB FREQ (Subwoofer Frequency Control):** Adjusts the crossover frequency for the subwoofer output, typically from 30Hz to 120Hz.
4. **FADER (Front/Rear Fader Control):** Balances the audio output between the front and rear speaker channels.
5. **AUX/CD Input Select Switch:** Toggles between the AUX input and CD input sources.
6. **Equalization Bands (50Hz, 125Hz, 315Hz, 750Hz, 2.2KHz, 6KHz, 12KHz):** Seven individual frequency band controls, each adjustable from -12dB to +12dB to fine-tune the audio response.

4.2 Rear Panel Connections

The rear panel provides all necessary input and output connections for your car audio system.



Figure 3: Rear angled view of the PLINIUS EQ-70 equalizer, showing the RCA input/output connections and power terminal.

- **Power Terminal:** Connections for GND (Ground), +12V (Constant Power), and REM (Remote Turn-On).
- **CD Input (RCA):** Audio input from your head unit's CD/main output.
- **AUX Input (RCA):** Auxiliary audio input for external devices.
- **FRONT Output (RCA):** Audio output for front speakers/amplifiers.
- **REAR Output (RCA):** Audio output for rear speakers/amplifiers.
- **SUB Output (RCA):** Audio output for subwoofer amplifier.

5. SETUP AND INSTALLATION

Proper installation is crucial for optimal performance. Follow these steps carefully.

5.1 Wiring Diagram

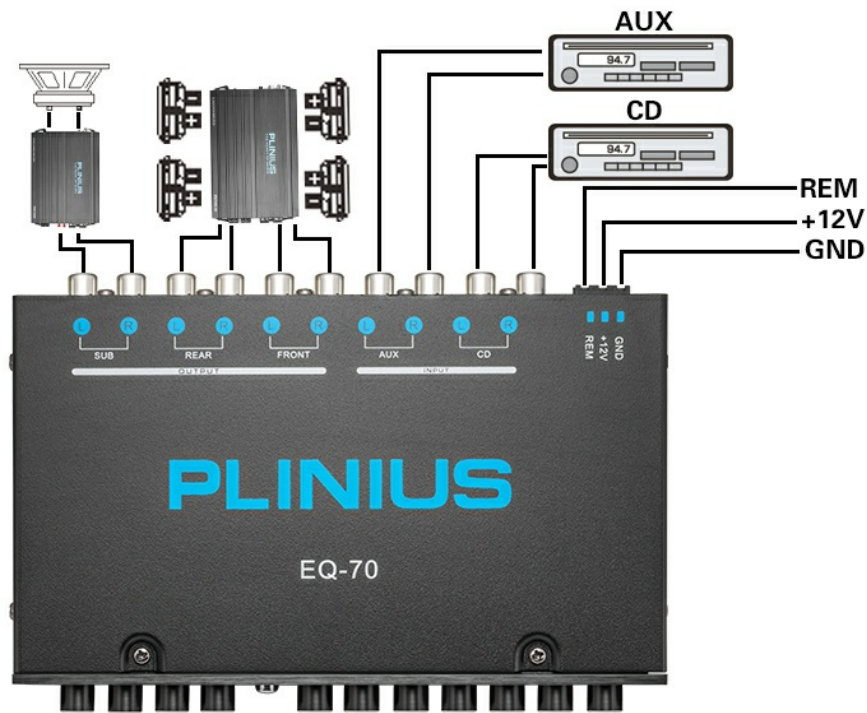


Figure 4: Typical wiring diagram for the PLINIUS EQ-70 equalizer in a car audio system.

5.2 Power Connections

1. **GND (Ground):** Connect this terminal to a clean, unpainted metal surface of the vehicle chassis. Ensure a solid electrical connection.
2. **+12V (Constant Power):** Connect this terminal directly to the positive (+) terminal of the vehicle's battery. Use an appropriate fuse (not included) as close to the battery as possible.
3. **REM (Remote Turn-On):** Connect this terminal to the remote output wire from your car's head unit. This will turn the equalizer on and off with your head unit.

5.3 Audio Connections

1. **Input:** Connect the RCA output from your head unit (CD/main output) to the EQ-70's CD Input. If using an auxiliary device, connect its output to the AUX Input.
2. **Output:** Connect the EQ-70's FRONT, REAR, and SUB outputs to the corresponding RCA inputs on your amplifiers.

5.4 Mounting

Choose a suitable location for mounting the EQ-70, such as under the dashboard, in the glove box, or in the center console. Ensure the location allows for proper ventilation and easy access to controls. Use the provided mounting screws to secure the unit.

6. OPERATING INSTRUCTIONS

Once installed, follow these steps to operate your EQ-70 equalizer.

1. **Turn On:** Ensure your car's head unit is powered on. The EQ-70 will power on automatically via the remote turn-on connection.
2. **Select Input:** Use the **AUX/CD Input Select Switch** to choose between your CD/main input or the auxiliary input.

- 3. **Adjust Volume:** Start with the **VOL** control at a low setting. Gradually increase it to your desired listening level.
- 4. **Set Subwoofer Level:** Use the **SUB VOL** control to adjust the subwoofer output level relative to the main speakers.
- 5. **Adjust Subwoofer Frequency:** Use the **SUB FREQ** control to set the desired crossover point for your subwoofer. This determines which low frequencies are sent to the subwoofer.
- 6. **Balance Front/Rear:** Use the **FADER** control to balance the sound between your front and rear speakers.
- 7. **Equalization:** Adjust the seven frequency band controls (50Hz, 125Hz, 315Hz, 750Hz, 2.2KHz, 6KHz, 12KHz) to fine-tune the audio to your preference. Each knob can boost or cut the specific frequency by up to 12dB.

7. MAINTENANCE

- **Cleaning:** Use a soft, dry cloth to clean the unit. Do not use harsh chemicals or abrasive cleaners.
- **Ventilation:** Ensure the unit's ventilation openings are not blocked to prevent overheating.
- **Connections:** Periodically check all wiring connections to ensure they are secure and free from corrosion.

8. TROUBLESHOOTING

If you encounter issues with your EQ-70, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
No power/Unit does not turn on	• Loose power connections (GND, +12V, REM) • Blown fuse • Head unit not providing remote signal	• Check and secure all power wiring. • Inspect and replace the fuse if necessary. • Verify head unit remote output is active.
No sound output	• Incorrect input/output connections • Input source not selected • Volume too low • Amplifiers not powered on	• Verify all RCA cables are correctly connected. • Ensure the correct input (AUX/CD) is selected. • Increase the VOL control. • Check amplifier power status.

Problem	Possible Cause	Solution
Distortion or poor sound quality	• Input signal too high • Gain settings on equalizer or amplifier too high • Improper equalization settings • Loose speaker wires	• Reduce the input level from the head unit. • Lower the VOL and individual band controls on the EQ-70, and check amplifier gain settings. • Adjust equalization bands to a neutral position and re-tune. • Check all speaker connections.
Subwoofer not working or too quiet/loud	• SUB VOL or SUB FREQ incorrectly set • Subwoofer amplifier issues	• Adjust SUB VOL and SUB FREQ controls. • Verify subwoofer amplifier is powered and receiving signal.

9. SPECIFICATIONS

- **Equalization Bands:** 7 (50Hz, 125Hz, 315Hz, 750Hz, 2.2KHz, 6KHz, 12KHz)
- **Boost/Cut Range:** ±12dB per band
- **Subwoofer Frequency Adjustment:** 30Hz to 120Hz
- **Maximum Output Voltage:** 7 Volts
- **Signal-to-Noise Ratio (S/N):** 90 dB
- **Total Harmonic Distortion (THD):** 0.05%
- **Input Sensitivity:** Adjustable
- **Power Supply:** 30V bi-polar switching power supply (operates on 12V DC vehicle power)
- **Dimensions (L x W x H):** 4.6 x 7.16 x 1 inches
- **Weight:** 1.3 pounds

10. WARRANTY INFORMATION

This PLINIUS EQ-70 unit comes with a 1-year limited warranty from the date of purchase. This warranty covers defects in materials and workmanship under normal use. It does not cover damage caused by improper installation, accident, misuse, abuse, negligence, unauthorized modification, or normal wear and tear. Please retain your proof of purchase for warranty claims.

11. SUPPORT

For technical assistance or customer support, please contact your authorized PLINIUS dealer or visit the official PLINIUS website for contact information.

