

PUZU PZ-C7

PUZU PZ-C7 DSP Car Audio Digital Signal Processor User Manual

Model: PZ-C7 | Brand: PUZU

1. INTRODUCTION

The PUZU PZ-C7 is a sophisticated 4-channel to 6-channel Digital Signal Processor (DSP) car audio amplifier designed to significantly upgrade your vehicle's sound system. It features a built-in 4-channel amplifier and offers advanced sound tuning capabilities via APP, PC, and Bluetooth. This device is specifically designed for plug-and-play installation in 2005-2025 Toyota models (excluding JBL systems), ensuring a non-destructive connection to basic audio systems without factory amplifiers. The PZ-C7 provides precise audio control, allowing for a customized and enhanced listening experience.



Figure 1.1: The PUZU PZ-C7 DSP amplifier unit shown with its accompanying wiring harnesses, ready for installation.

2. KEY FEATURES

- **4-Channel to 6-Channel DSP Amplifier:** Integrates a 4-channel amplifier with 6 RCA output channels, supporting the addition of active subwoofers.
- **Advanced Equalization:** All six output channels feature a fully adjustable 15-band EQ with floating-point high-precision tuning control.
- **Powerful Output:** Delivers a peak power of 4x150W and RMS power of 4x50W at 4ohm impedance.
- **High Fidelity Audio:** Boasts a Signal-to-Noise Ratio (SNR) greater than 108dB, a frequency response of 20Hz-20kHz, and a Total Harmonic Distortion (T.H.D) less than 0.01%.
- **Versatile Connectivity:** Supports wireless connection via iOS App, Android App, and PC software for sound tuning. Features Bluetooth 5.0 for music streaming and USB ports for playing music.
- **Plug & Play Installation:** Includes a dedicated wiring harness suitable for 2005-2025 Toyota Tundra, Tacoma, 4Runner, Corolla, Sienna, and RAV4 models (non-JBL systems), allowing for non-destructive installation without damaging original audio cables.

- **Time Delay Function:** Adjustable sound field delay to achieve spatial editing and optimize sound positioning.
- **Multiple Storage Modes:** Features 6 storage modes for saving preferred audio settings.

Exclusive professional grade DSP chipHigh quality audio processor

Professional Music Tuners

PUZU

Correction / Correct loss and delay in sound transmission

Reduction / Restore the original waveform phase in the source signal, making the music details clearer and more natural, and the sound is fuller and expressive

Bass boost / The bass is more powerful and dynamic

Sound Effect / 5.1 stereo surround, the sound has a sense of texture and space

9 Major Features

We only Want good sond quality in our cars

ISO Wiring Harness	Exclusive PUZU Must Core 4cores 32bits	PC -8bands EQ Phone-7EQ
Time-Delay 5.1 stereo Surround	Support Bluetooth Play Lossless Music	RCA terminal output you can connect to extra Amplifier and sub
Improve your original Car sound strongly	Built in 8 Storage Mode	Lossless Music support

Figure 2.1: Overview of the PUZU DSP Amplifier's primary features and capabilities.

Professional Music Tuners

Time Delay

Best Sound Position

We called Emperor Position

You can easy use this function by computer and android phone app.

Emperor position

Stereo surround

You can use Time-Delay function realise the Emperor position Or stereo surround effect.

Figure 2.2: Detailed breakdown of the nine major features enhancing audio quality and user experience.

3. SETUP AND INSTALLATION

The PZ-C7 is designed for a straightforward plug-and-play installation in compatible Toyota vehicles. Ensure your

car does not have a factory amplifier system, as this product is not designed for such configurations without significant modification.

3.1. Product Overview and Connections

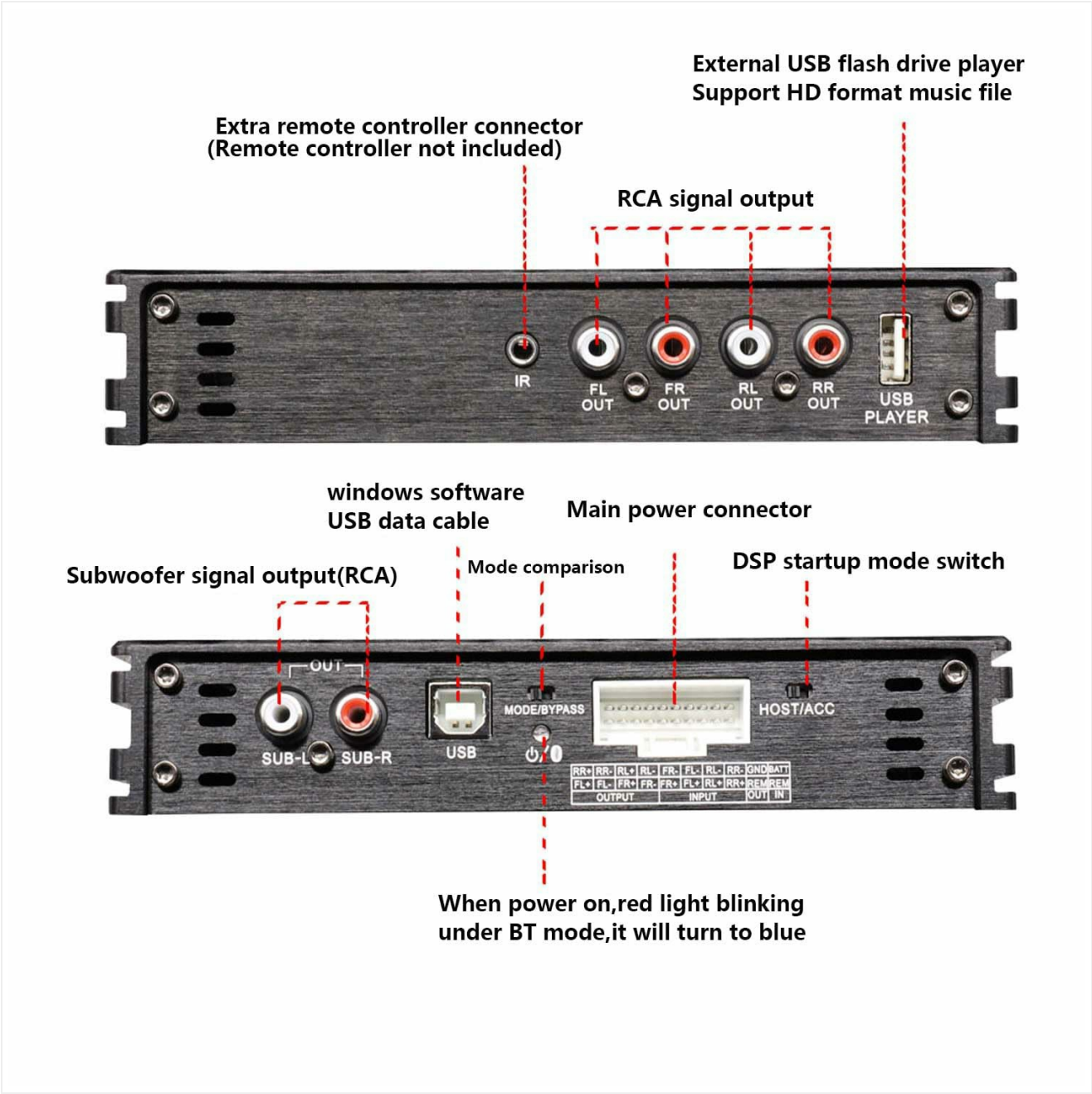


Figure 3.1: Detailed view of the PZ-C7's input and output ports, including RCA outputs, USB ports, and the main power connector.

3.2. Wiring Harness Selection

The package includes two types of wiring harness cables. Select the one suitable for your car radio installation. These harnesses facilitate a male-to-female plug connection, using the same power as your car stereo.

Provide two types of wiring harness cables.

You just need to use one of the wiring harness cables suitable for your car radio installation.



Male Plug to Car Radio



Female Plug to Factory stereo Plug



Male Plug to Car Radio



Female Plug to Factory stereo Plug

Figure 3.2: Different wiring harness options for compatibility with various car radio setups.



Wiring Harness (Male to Femal plug)

(Male plug to the car stereo/Car DVD,Femal plug to the factory radio Plug),USE the same power with car stereo



Figure 3.3: Schematic showing how the wiring harness integrates the DSP amplifier with your car's existing audio system.

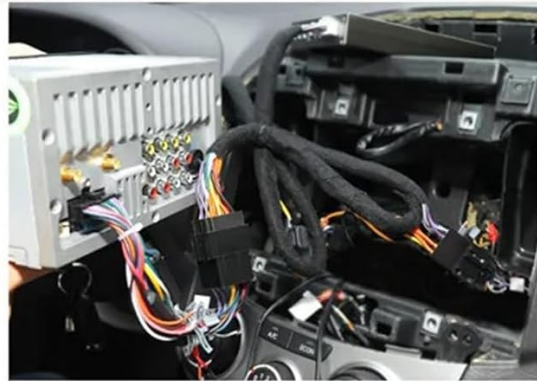
3.3. Installation Steps (Approx. 15 Minutes)

1. **Step 1:** Remove the decoration panel of your car's dashboard, take out the factory CD player, and unplug its power cable.
2. **Step 2:** Connect one end of the adapter harness to the DSP unit. Connect the other end of the harness to the factory car radio plug and the car stereo power connector separately.
3. **Step 3:** Carefully place the DSP unit into the glove box or another suitable, secure location.
4. **Step 4:** Installation is complete. Proceed to sound tuning using PC software or the mobile application.

Take 15 Minutes, Fast finish installation of PZ-C7 by simple 4 steps



1. Remove decoration panel, take out the factory CD player, and unplug the power cable.



2. Connect one end of the adapter harness to the DSP, and connect the other end to the factory car radio plug and car stereo power connector separately.



3. Put the DSP into glove box.



4. Installation completed, and sound tuning by PC or android app

Figure 3.4: Visual guide for the quick and easy 4-step installation process.

3.4. Installation Video



Video 3.1: An official product video demonstrating the installation and features of the PZ-C7 DSP Car Audio Amplifier. This video provides a visual walkthrough of the product and its setup process.

4. OPERATING AND TUNING

The PZ-C7 offers flexible sound tuning options via PC software or mobile applications (iOS/Android) to customize your audio experience.

4.1. PC Software Tuning

Connect the DSP to your PC using the provided USB data cable. The PC software provides a comprehensive interface for detailed sound adjustments, including the 15-band equalizer, time delay, and other audio parameters.

PC software sound tuning:



Use data cable connect DSP & PC



Double Module Bluetooth 5.0
Fast speed data transfer

IOS app wireless tuning or Android app wireless tuning

PZ-C7 



Figure 4.1: The PC software interface for precise sound tuning and equalization.

4.2. Mobile App Wireless Tuning

The PZ-C7 supports wireless tuning via dedicated iOS and Android applications, utilizing Bluetooth 5.0 for fast data transfer. This allows for convenient adjustments directly from your smartphone.



Figure 4.2: The mobile application interface for wireless sound tuning on the go.

4.3. Time Delay Function

The Time Delay function allows you to adjust the sound output timing for each speaker, creating an optimal "Emperor Position" or stereo surround effect within your vehicle. This feature can be easily configured using both the computer software and the Android phone app.

Wiring Harness (Male to Femal plug)

(Male plug to the car stereo/Car DVD,Femal plug to the factory radio Plug),USE the same power with car stereo



Figure 4.3: Understanding and utilizing the Time Delay feature for enhanced sound staging.

5. MAINTENANCE

To ensure the longevity and optimal performance of your PUZU PZ-C7 DSP amplifier, follow these general maintenance guidelines:

- **Cleaning:** Use a soft, dry cloth to wipe the exterior of the unit. Avoid using harsh chemicals, solvents, or abrasive cleaners, as they may damage the finish.
- **Ventilation:** Ensure the unit is installed in a location with adequate ventilation to prevent overheating. Do not block any ventilation openings on the device.
- **Connections:** Periodically check all wiring connections to ensure they are secure and free from corrosion. Loose connections can lead to signal loss or poor performance.
- **Environmental Conditions:** Avoid exposing the unit to extreme temperatures, direct sunlight, or excessive moisture.

6. TROUBLESHOOTING

If you encounter issues with your PZ-C7 DSP amplifier, refer to the following common troubleshooting steps:

Problem	Possible Cause	Solution
No Sound Output	<ul style="list-style-type: none">• Loose power or audio connections.• Incorrect input/output settings in DSP software.• Vehicle's factory amplifier system is present (not compatible).	<ul style="list-style-type: none">• Check all wiring harnesses and RCA connections.• Verify settings in the PC or mobile app.• Confirm your vehicle does not have a factory amplifier.
Distorted Sound	<ul style="list-style-type: none">• Gain levels set too high.• Incorrect EQ settings.• Speaker impedance mismatch.	<ul style="list-style-type: none">• Adjust gain levels in the DSP software.• Reset or re-tune EQ settings.• Ensure speakers are 4ohm.

Problem	Possible Cause	Solution
Bluetooth Connection Issues	<ul style="list-style-type: none"> DSP not in pairing mode. Interference from other devices. Outdated app version. 	<ul style="list-style-type: none"> Ensure the DSP's Bluetooth indicator is active. Move away from other wireless devices. Update the mobile app to the latest version.
Unit Not Powering On	<ul style="list-style-type: none"> No power supply to the unit. Blown fuse. 	<ul style="list-style-type: none"> Check vehicle's power source and wiring harness connection. Inspect and replace any blown fuses in the vehicle's audio circuit.

7. SPECIFICATIONS

- **Model Number:** PZ-C7
- **Product Dimensions:** 6.69 x 5.12 x 1.3 inches
- **Weight:** 3.5 Pounds
- **Peak Power:** 4x150W
- **RMS Power:** 4x50W
- **Impedance:** 4ohm
- **Output Channels:** 6 (RCA output)
- **Signal to Noise Ratio (SNR):** >108dB
- **Frequency Response:** 20Hz-20kHz
- **Total Harmonic Distortion (T.H.D):** <0.01%
- **Operating Voltage:** DC 12V
- **Bluetooth Version:** 5.0
- **EQ Bands:** 15-band (adjustable)
- **Manufacturer:** PUZU
- **Country of Origin:** China



Figure 7.1: Physical dimensions of the PZ-C7 DSP amplifier.

8. What's in the Box

The PUZU PZ-C7 package includes the following components:

- PUZU-C7 DSP Amplifier Unit
- Wiring Harness Cable 1
- Wiring Harness Cable 2
- USB PC Tuning Data Cable
- User Manual

Take 15 Minutes, Fast finish installation of PZ-C7 by simple 4 steps



1. Remove decoration panel, take out the factory CD player, and unplug the power cable.



2. Connect one end of the adapter harness to the DSP, and connect the other end to the factory car radio plug and car stereo power connector separately.



3. Put the DSP into glove box.



4. Installation completed, and sound tuning by PC or android app

Figure 8.1: All items included in the PZ-C7 product packaging.

9. SUPPORT

For any questions or assistance regarding the PUZU PZ-C7 DSP Car Audio Digital Signal Processor, please do not hesitate to contact our customer support team. We are committed to providing timely assistance and will respond to your inquiries within 24 hours.

Please refer to the contact information provided with your purchase or visit the official PUZU website for support details.