



# PZ-D8



소유자의 설치 설명서

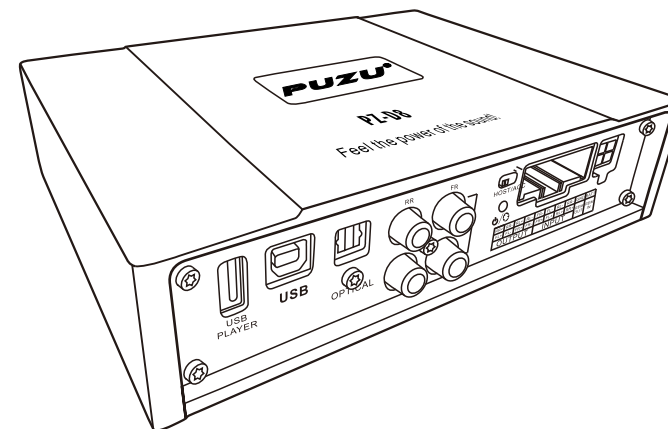
OWNER'S MANUAL&INSTALLATION MANUAL  
РУКОВОДСТВО ПО ЭКСПЛУАТАЦИИ И УСТАНОВКЕ

## PZ-D8 DSP AMPLIFIER USER'S GUIDE

### ● INTRODUCTION

Congratulations on you purchased of the PUZU PZ-D8 DSP amplifier. The high speed digital signal processor amplifier was designed in the united states with sound quality that exceeds that many conventional class D designs while offering stunnig efficiency.

When installed and configured properly this PZ-D8 DSP Amplifier will bring a new level of realism and impact to your mobile entertainment system. To get the best performance from your DSP amplifier PUZU recommends that you have this amplifier installed and configured by an experienced professional.



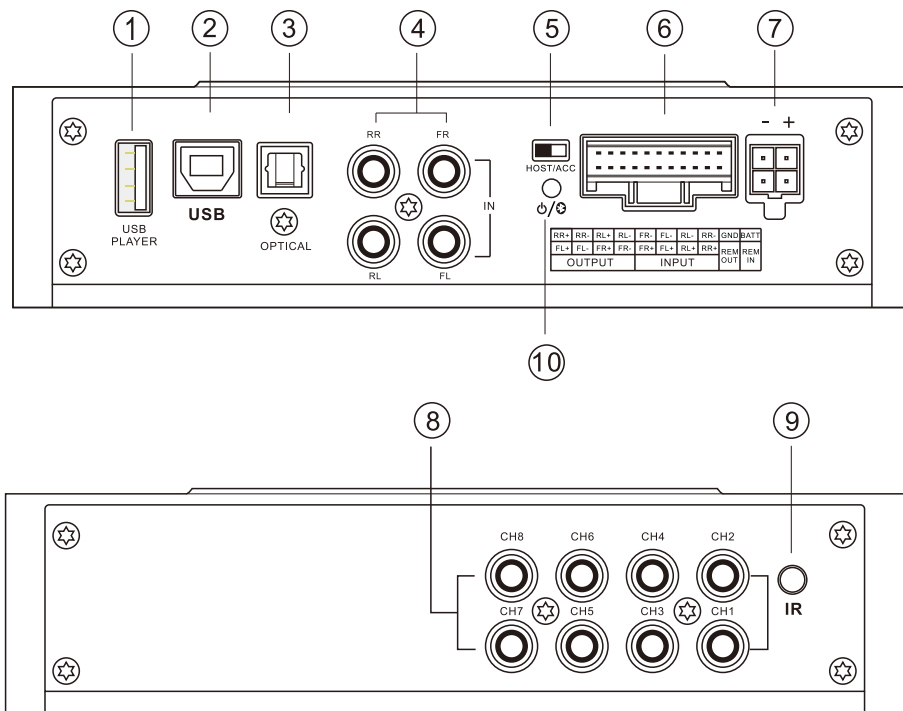
### ● ABOUT THE MANUAL AND WARRANTY

This manual describes the basic requirements to install PUZU PZ-D8 DSP amplifier, the installation and configuration of this amplifier can be complex. If you do not possess the the necessary knowledge, experience and/or tools to perform this installation please contact your local authorized PUZU dealer to arrange for professional installation. Keep all instructions and your sales receipt for future reference and warranty purpose.



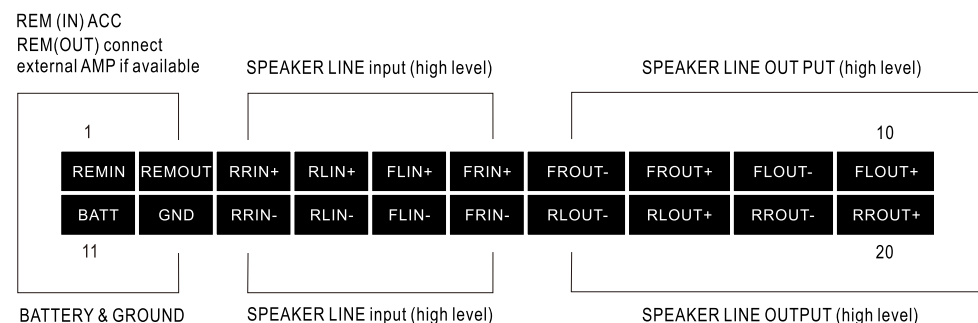
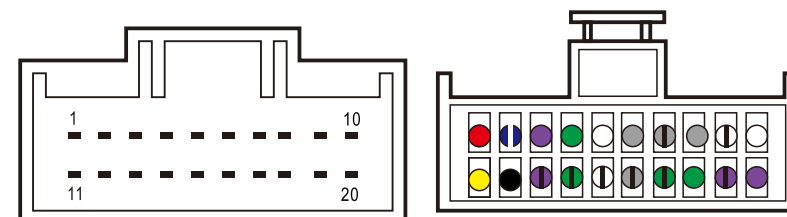
### WARNING

PUZU products are capable of producing high sound pressure level that can damage your hearing and make it difficult for the driver to hear other cars or emergency vehicles. PUZU wants you as a customer for life-please be responsible at all times when enjoying your audio system. PUZU takes no responsibility for any personal injury. Loss or damage associated with the use, or miss-use of this product. Please refer to the included warranty statement for details.



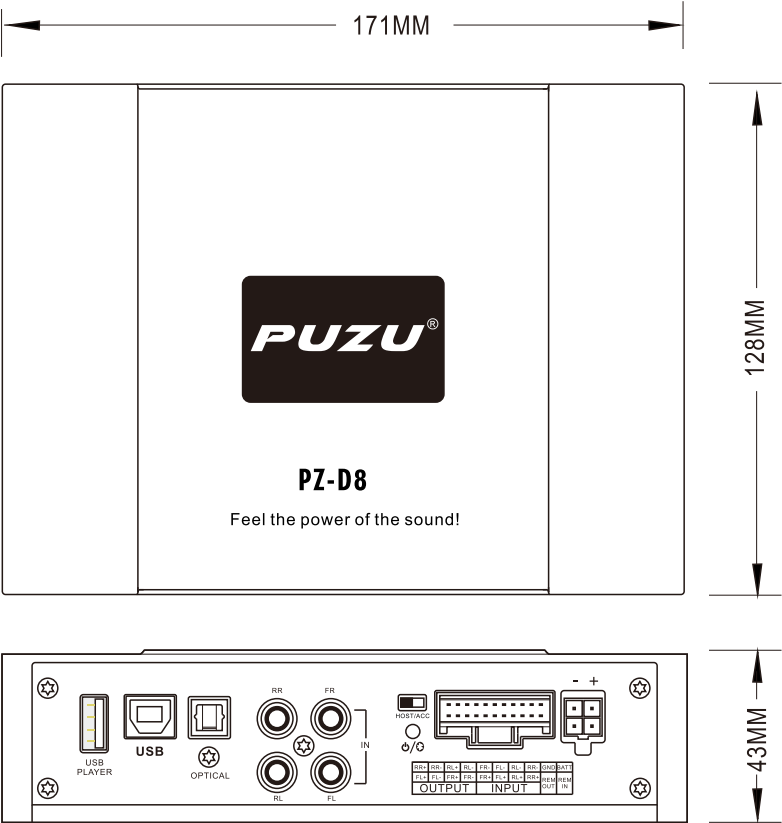
- ① **USB PLAYER**(Play USB music)
- ② **USB for connection of PC software** (data cable connection)
- ③ **OPTICAL INPUT**
- ④ **RCA INPUT** (FL,FR,RL,RR)
- ⑤ **HOST/ACC** This button is DSP star way,please put it in HOST (high level) side as default,it means DSP start with DC signal,usually 6V from car radio.if you can not operate DSP by HOST please try ACC,this means your car start by REM,some car with KEYLESS GO use this way.
- ⑥ **POWER CABLE HARNESS CONNECTOR**

PIN Definition as follows



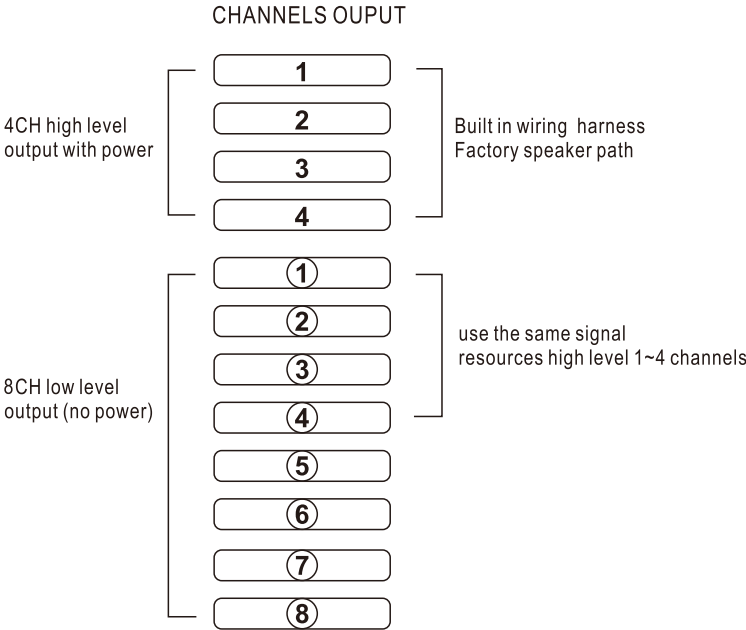
- ⑦ **EXTRA STABLE POWER SUPPLY**(You can connect this cable to get more stable power supply,especially when you use this device from RCA in and RCA out)
- ⑧ **RCA OUTPUT CH1~CH8**
- ⑨ **IR remote controller receiver slot** (Remote controller is optional)
- ⑩ **STATUS LIGHT** (When you right connect the unit,the red light blinking as default, when you playing bluetooth or USB,the light turns to be blue)

PRODUCT SIZE



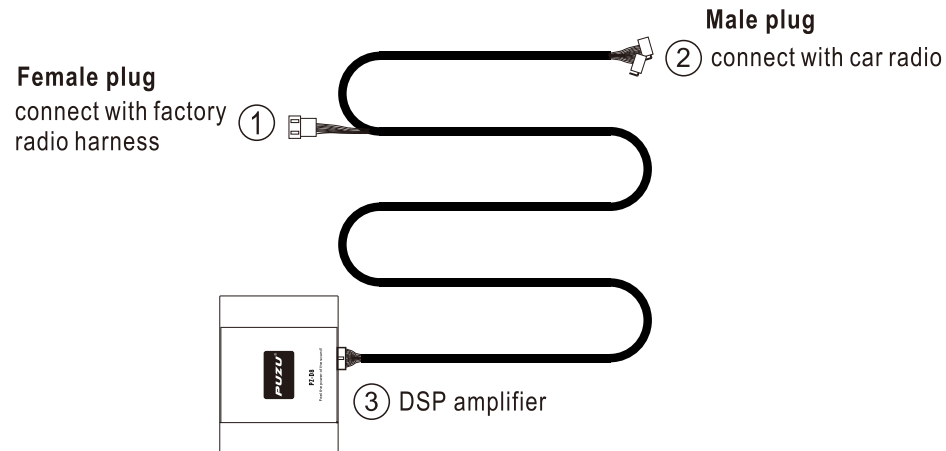
PZ-D8 is D-Class Car DSP Amplifier built in TI3116 Digital Amplifier IC, with 4X70W RMS Power output, it overcomes inherent acoustical anomalies within vehicles to develop a well balanced response and proper sound stage even from a factory head unit. Customize your system with the 31-bands EQ and make precise adjustments to the detailed high/low crossovers and expansive time correction for each of the 8 channels. Easily control PZ-D8 via an android smartphone connection or wired connection to your PC, either way, you get fast, real-time results. The versatile PZ-D8 can be used with a factory system or other after market head unit.

Diagram of the relationship between the input and output channels of the PZ-D8



| Main Parameters   |                                                                   |
|-------------------|-------------------------------------------------------------------|
| RMS.POWER         | 4X70W @4ohm / 4X150W @2ohm                                        |
| PEAK.POWER        | 4X220W @4ohm / 4X500W @2ohm                                       |
| Frequency Respond | 20Hz~20KHz                                                        |
| T.H.D             | <0.01%                                                            |
| S/N               | >108dB                                                            |
| Isolation         | >90dB                                                             |
| Working voltage   | DC12V                                                             |
| Input             | 4CH RCA low level / 4CH high level input<br>Optical/USB/Bluetooth |
| Output            | 4CH high level output with power/8 RCA low level                  |

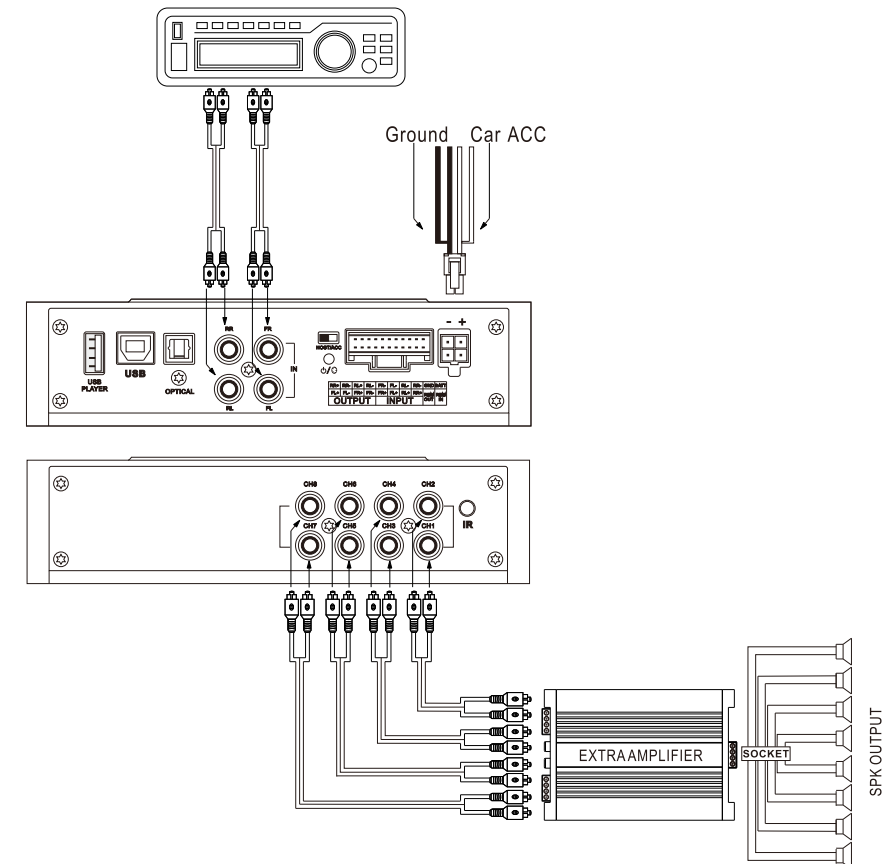
## ● ABOUT CONNECTION & DIAGRAM BASIC CONNECTION



PUZU Car DSP Amplifier harness with 3 terminals, Connect ① with your factory radio harness, connect ② with your car radio, and connect terminal ③ to PUZU Car DSP Amplifier.

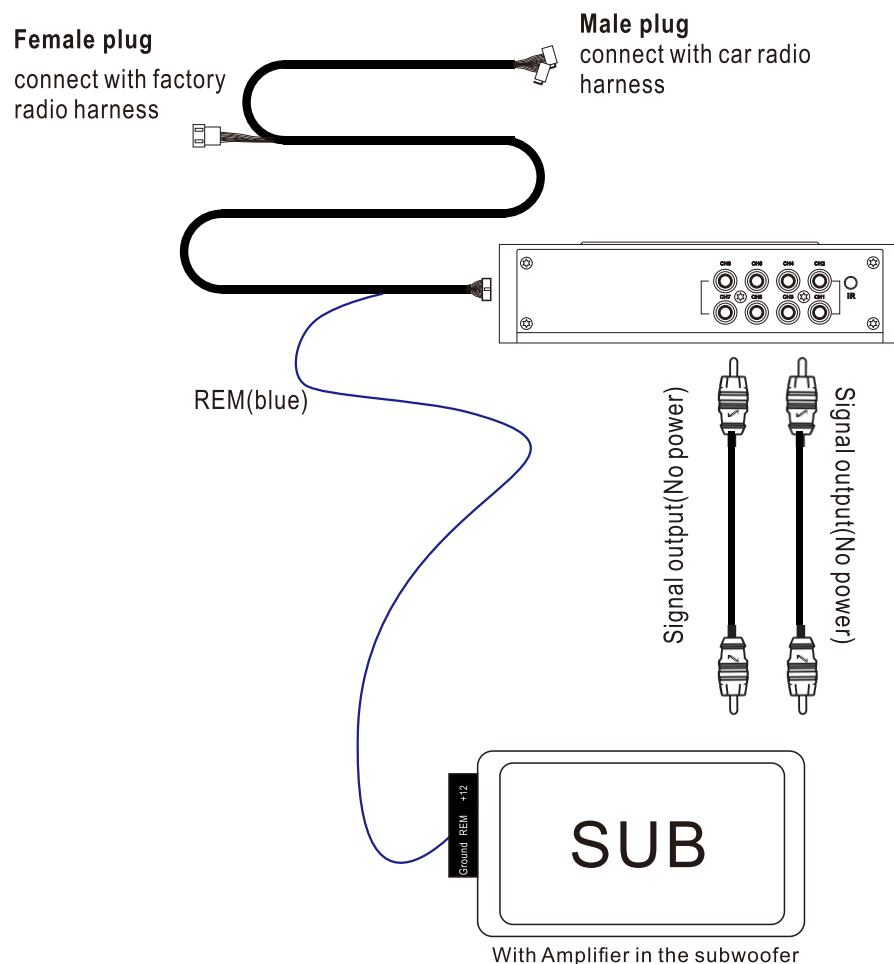
- DSP Amplifier use the same power source with your car radio.
- You can use PUZU DSP amplifier cable directly plug with your factory radio. If you changed your car radio to an after market headunit, then you need an adaptor.
- PZ-D8 with 4 channels high level & low level input, with 4 channels high level output & 8 channels low level (RCA) output, with complete 8X31 bands EQ separately control

## ● YOU CAN USE THE SOLUTION 2 AS FOLLOWS 4CH LOW LEVEL INPUT WITH 8CH LOW LEVEL OUTPUT (NEED EXTRA AMPLIFIER)



Make sure your car radio with low level output and provide complete frequency for each channels, stable power supply need be connected.

- YOU CAN USE THE SOLUTION 3 AS FOLLOWS  
USE PZ-D8UPGRADE YOUR 4 DOOR SPEAKERS+ACTIVE SUBWOOFER



Please connect the **separate blue wire**(control line) to your subwoofer amplifier REM You can connect CH5~CH8 any one of them connect with your active subwoofer

## PUZU PZ-D8 SOFTWARE USERS GUIDE

Thank you for choosing PUZU for your Car Audio system and for sharing our philosophy. PUZU PZ-D8Car DSP Amplifier software with the best PUZU technology in terms of digital signal processing (DSP)+built in amplifier.

Before reading this manual and considering using this software,first make sure the product installed correctly.Refer to the specific user's manual of the product if necessary. In order to obtain the best results,we recommend you have your PUZU PZ-D8 installed by Your PUZU dealer.



## WARNING

### SOFTWARE COMPATIBILITY

PC:Windows XP/Vista/Win7/8/10

The maximum resolution of the software 1024X768

### RECOMMENDED MINIMUM REQUIREMENTS

Operating system:Windows XP,Windows Vista,Windows 7,Windows 8,Windows10

Processor:1.67GHz,equivalent or more

RAM:1GB or more

Hard drive:512MB or more free space

Display:1024X768 or more

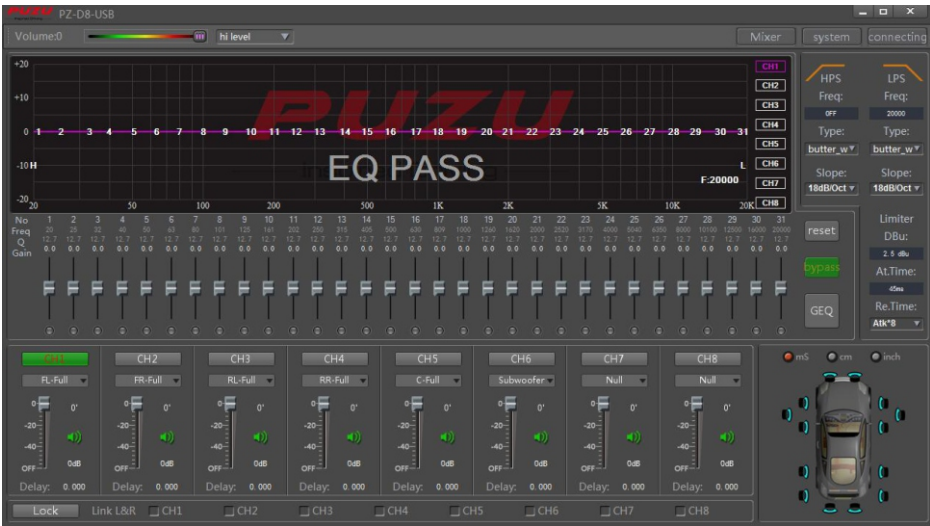


## SOFTWARE INSTALLATION WARNING

Before connecting your PUZU PZ-D8 software,close all open programmes, connect DSP with PC by USB date cable,allow your PC auto install the hard ware of the USB date cable.Open the software,the installation process running automatically.If you encounter any problems,please unistall the software and download the newest software from [www.puzuaudio.com](http://www.puzuaudio.com)

If you can not success install the software after try more times,please mail to [market@puzuaudio.com](mailto:market@puzuaudio.com) for futher help.

After you installed the software,you can see the main interface as follow picture.

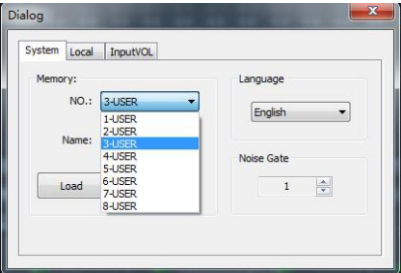


## Machine connections & file load

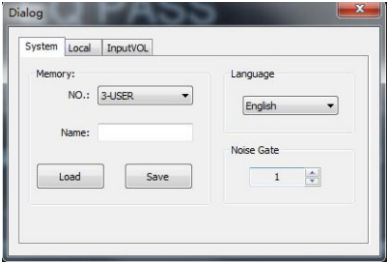
1.The interface will show [connecting] before connecting to the machine and show[connected] if the software has been successfully connected.



2. You can save the tuning sound datas to built in modes 1~8,or you can save to your local PC,so that you can directly upload the files if you meet the same car and same audio system next time.



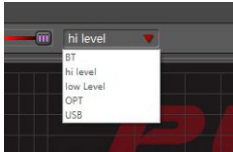
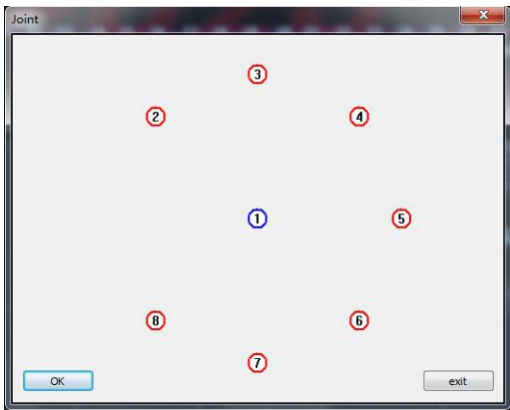
3. You can change system language Chinese/English.
4. Share your tuning parameters to other audio system which with the same speaker paramaters and car models.



5. Set a noise Gate,if the input signals is higher than the gate,it could be entered normally,otherwise,it will be blocked.If the gate is set reasonably,the machine will be automatically muted when the system has no signal inut,so as to make system output quieter,adjustment range:0~20.

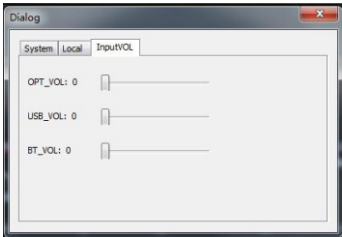
## Channel joint

You can free joint any channels from 1~8

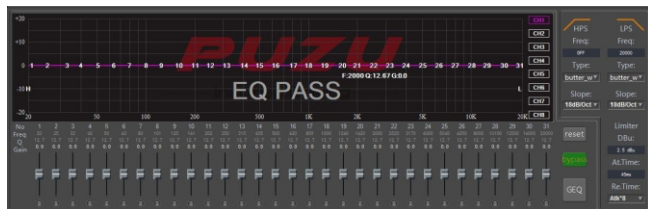


4. Types of sound sources are available for selection:Bluetooth,high level,and USB,the software set hi level as default.

6.select type of sound source from the drop down list.

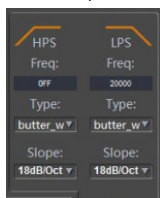


7.Adjust the input volume:optical/USB/BT



This interface show the main GEQ & PEQ display by tuning 31 bands EQ parameters you can reset and bypass those parameters,and there are some useful parameters like Freq,Q, Gain,which clearly and accurately display.

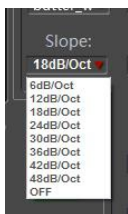
- a. You can tuning the high pass and low pass filter by HPS/LPS ,each channel is equipped with high pass filter and low pass filter.



- b. Filter types:butterworth,bassel and linkwitz-riley



- c. The range of slope of filter (slope) is 6dB/Oct ~48dB/Oct,and the resolution is 6dB/oct



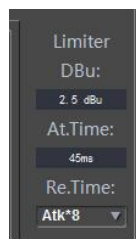
- d. When you press PEQ, you can tuning the EQ by drag or pull the points any of 1~15.



- e. When you press GEQ, you can tuning the EQ by detail parameters you manually set it

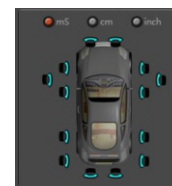


- f. limiter is a circuit that allows signals below a specified input power or level to pass unaffected while attenuating (lowering) the peaks of stronger signals that exceed this threshold. Limiting is a type of dynamic range compression. Clipping is an extreme version of limiting. If you not familiar with this function and not know much about it, just let it as default.

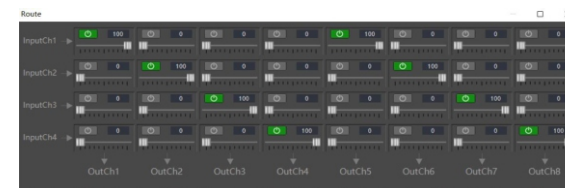


This interface you can control the main volume for each channels,phase front left/front right/Rear left/Rear right/Center/Sub.

- g. you can set all 8 channels time delay parameters separately. you can set the time delay unit CM/MS/inch, usually we recommend you use CM



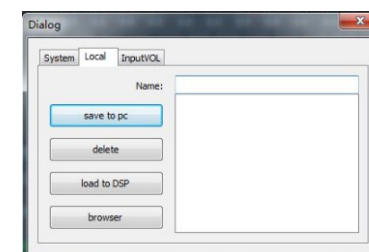
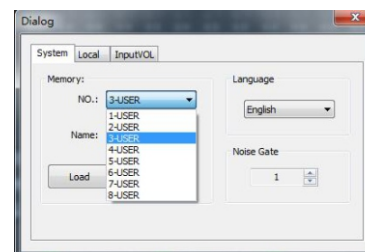
Choose delay unit:ms/cm/inch  
ms:0~20ms  
cm:0~692cm  
inch:0~272.44inch



- h. Mixer interface show as above free choose the source, mix from input1~input4 to out1~out8.



Most importantly, please save tuning parameters to 1-USER ~8-USER when you finish sound tuning every time. if you have local pc file saved before, just press the load button to upload the file.



## PZ-D8 ANDROID APP USER'S GUIDE

Download Android apk file from [www.puzuaudio.com](http://www.puzuaudio.com) for free  
PZ-D8 built in double moudle bluetooth



## INSTALLATION STEPS OF ANDROID APP



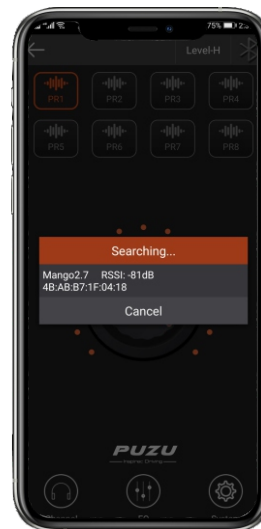
**Step1:** Press PZ-D8 ICO



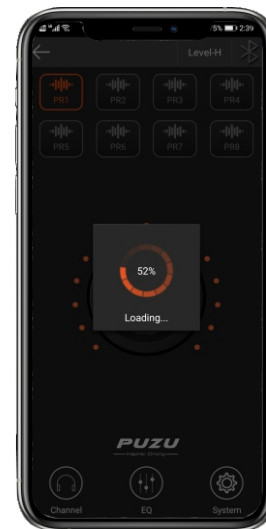
**Step2:** Press bluetooth logo



**Step3:** allow the app open your bluetooth



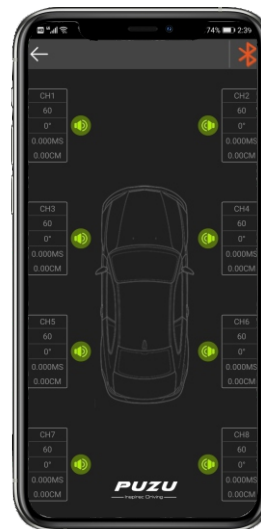
**Step4:**When it appear Mango \*\*,Press the words.



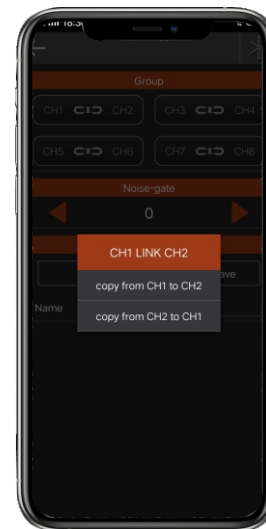
**Step5:**Waiting loading the date



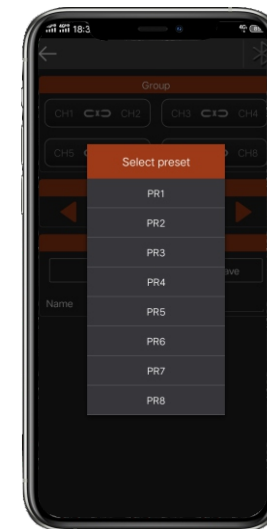
**Step6:**Success



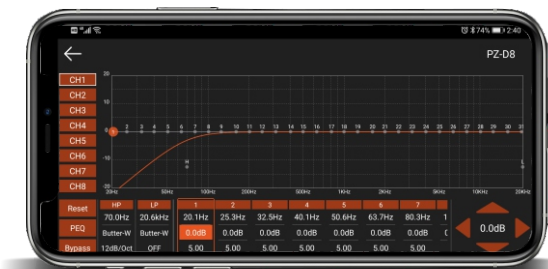
**Chanel:**Press Channels ico  
You will see the interface,you can set each channel's Gain/Phase/Time delay/Open/close volume.



**Link:**Press the "system" button you can set the link channel function CH1&CH2 CH3&CH4, CH5&CH6,CH7&CH8



**Presets Mode:**You can select PR1 ~ PR8,save and selection,for example, if you finished sound tuning you can save to any one of them.

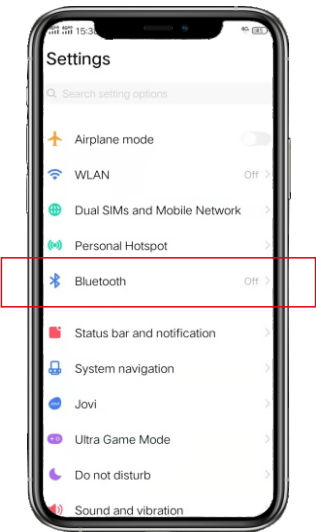


**EQ SETTING:**You can separate or group setting CH1~CH8 reset/PEQ,GEQ/ Bypass etc functions.

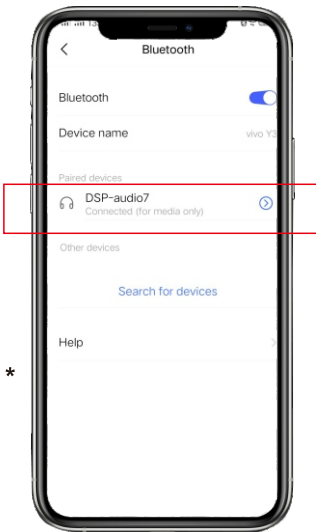
**! TIPS**

you can use this sound tuning app only by android system phone not support by ios, but you can listen to bluetooth music by both ios and android system smartphone.

- 1.Open your phone setting (ios and android )
- 2.Search DSP-audio\* and connect it.



**Setep 1.**  
Open your phone bluetooth



**Setep 2.**  
Connect DSP-audio \*

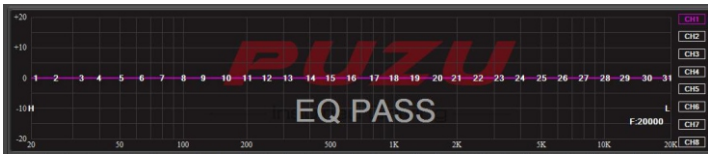
**! \*** means the version number,it will be upgraded every month

**BEFOR USE PUZU PZ-D8 SOFTWARE YOU NEED TO KNOW BASIC SOUND PARAMETERS OF DIFFERENT MUSIC INSTRUMENTS PERFORMANCE,SO YOU CAN BETTER UNDERSTAND HOW TO TUNING THE SOUND!**

|                 |                                                                                                                                       |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------|
| piano           | The range 27.5-48.5Hz affects the frequency, the tone becomes thinner as the frequency increases: 20-50Hz provides the peak frequency |
| Saxophone       | 600-2Khz affect the brightness, enhance the frequency can make the sound color clear                                                  |
| guitar          | improve 100-300Hz can make the sound much more fullness; enhance 2k-5KHz can increase the tone performance                            |
| Bass guitar     | 60-100Hz bass fullness; 60-1KHz impact intensity, 2.5Khz is plectrum audio                                                            |
| electric guitar | 240H is the fullness frequency, 2.5KHz is the brightness frequency; plectrum is 3K-4KHz                                               |
| Electric bass   | 80-240Hz is fullness frequency; 600-1Khz impact intensity; 2.5KHz is plectrum audio                                                   |
| tambourine      | 200-240Hz is the resonance frequency; 5KHz affect the presence                                                                        |
| Snare drum      | 240Hz affect fullness; 2KHz impact loudness; 5KHz affect plucked audio                                                                |
| Bass drum       | 60-100Hz is the bass force frequency; 2.5KHz is the percussion sound frequency                                                        |
| big drum        | 60-150Hz is the intensity of frequency; affect fullness                                                                               |

**! TIPS**

- Super bass:20Hz~40Hz,
- Bass:40Hz~150Hz,
- Midrange to Bass:150Hz~500Hz,
- Midrange:500Hz~2KHz,
- Midrange to Treble:2KHz~5KHz,
- Treble:7KHz~8KHz,
- Super Treble:8KHz~10KHz,



## PZ-D8 DSP AMPLIFIER USER'S GUIDE

| Frequency   | Lower                            | Proper                           | higher                                      |
|-------------|----------------------------------|----------------------------------|---------------------------------------------|
| 16K-20KHz   | The tone lacks of expressiveness | Tone expressive and charm        | Strong sense of instability                 |
| 12K-16KHz   | Lost luster                      | Golden splashes                  | Hairy, harsh                                |
| 10K-12KHz   | Boring, tarnished                | Strong sense of metal            | Light noise                                 |
| 8K-10KHz    | dull                             | sound is smooth                  | sharp                                       |
| 6K-8KHz     | dim                              | Transparent                      | Tooth sound heavy                           |
| 5K-6KHz     | vague                            | High definition                  | sharp                                       |
| 4K-5KHz     | the sound is getting far         | goodsense of loudness            | the sound is getting close                  |
| 4KHz        | blurry                           | Good Penetration                 | Cough sound is heavy                        |
| 2K-3KHz     | hazy                             | Brightness is better             | rigid                                       |
| 1K-2KHz     | Loose, tone off                  | good sense of transparency       | Jump sense                                  |
| 800Hz       | Loose                            | Strong sense                     | guttural is heavy                           |
| 500-800Hz   | Shrinkage                        | The outline of the sound is good | The sound protrudes forward                 |
| 300-500Hz   | Empty sense                      | Voice power good                 | Phone sound color                           |
| 150Hz-300Hz | Soft feeling                     | Sound intensity feeling good     | stiff                                       |
| 100-150Hz   | thin                             | Fullness increased               | Turbid "hum"                                |
| 60-100Hz    | Weakness                         | Strong sense of depth            | Low frequency resonance sound appears "hoo" |
| 20-60Hz     | emptiness                        | Good sense of space              | Low frequency resonance sound appears "hoo" |

### PLANNING YOUR INSTALLATION

It's important that you take the time to read this manual and that you plan your installation carefully. It's very easy to damage expensive vehicle systems in modern automobiles. Never assume that you have found appropriate wires without consulting a reliable wiring diagram or without performing signal testing with proper test equipment. If you are uncomfortable or unfamiliar with reading diagrams or testing signals, please enlist the services of your authorized PUZU Audio dealer to perform the installation. PZ-D8 support universeal DSP cable and No-destructive wiring harness. Plug & Play, easy install it to your car audio system

## PZ-D8 DSP AMPLIFIER USER'S GUIDE

### SIMPLE FAULT ANALYSIS AND TROUBLESHOOTING

|                                                                                                                                                                         |                                                                                                                                                                                                                                                             |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The harness connector does not match the original car                                                                                                                   | Harness for the car dedicated, please determine your model and the height of the model, and inform the local dealer or agent                                                                                                                                |
| Products in the use of the process of noise                                                                                                                             | Make sure the host cable is properly connected to check for loosening. After the exclusion is still noise, please check the ground with the original car CD machine shell connection. Still can not be resolved please return to the local dealer or agent. |
| Work indicator light does not shine, no sound                                                                                                                           | Please check if the tail has been properly connected, check the original car with or without amplifier or modified amplifier                                                                                                                                |
| The original car host and the machine can't get power on                                                                                                                | Check whether the original power cord is connected, the original car with original car host shell, restore the original car position                                                                                                                        |
| there is a "pump" sound when connected the DSP with subwoofer                                                                                                           | Please connect the blue wire of the harness cable to your car subwoofer's REM plug                                                                                                                                                                          |
| All connection well and there is no sound come from speaker after few seconds sound come again from speaker. or there is a "zizizi" or "didi" sounds come from speaker. | You car with speaker detection function.<br>Solution: Between the 4 high-level input ports of the DSP power amplifier and the 4 high-level output ports of the host, each interface is connected in parallel with a 33 ohm, 10W cement resistor.            |
| DSP can not get power on when choose "Host" start up                                                                                                                    | switch to "ACC" start up and then connect the red line of the harness cable to your car ACC line                                                                                                                                                            |
| Exist button noise come from speaker when play DSP                                                                                                                      | Usually it comes from your factory radio. the noise sound source come from it, after it get through DSP, noise is amplified, you can try adjust the button "Noise get threshold" from the software by PC computer.                                          |

## PUZU -WARRANTY CARD

Dear Customer,  
Thank you purchased puzu product.To get yourself familiarize with the features and operation of the system.we suggest you to read the operating instruction manual provided along with the set.This warranty card is an assurance that you have purchased the best.Please preserve this card to avail the warranty service during the unlikely even of any problem.

### Warranty:

Your puzu car audio system/Accessory is fully guaranteed against manufacturing defect or material defect for the period of 12(twelve)months from the date of sales.Satisfying the terms&conditions given below.Equipment in the need of services should be referred to the authorized puzu dealer.

### Warranty Terms&Conditions:

Warranty will be entertained only when this card and original invoice or the sales receipt(as proof of the date of purchase, model,serial no.and the dealer's name is presented together with the product under complaint.

Warranty does not cover damage to puzu equipments caused by accident,misuse,repairs additions and modifications carried out by unauthorized dealers or if tampered in any other manner.

Warranty will not apply if the type or serial number on the product has been altered deleted,removed or made illegible.

This warranty does not cover the cabinetry and any apperance item,user attached antennas,any damage to recordings orrecording tapes or disc,damage due to lightning or due to power surges.

This warranty does not cover problem due to improper installation,setup adjustment and signal reception problems

We reserve the right to refuse warranty service if the above terms and onditions are violated.

**THIS WARRANTY DOES NOT COVER DAMAGE TO PUZU EQUIPMENT CASUED BY USAGE OF INFERIOR QUALITY WIRINGKIT/DAMAGED CASSETTE OR CD.**

**WARRANTY CARD-CAR DSP AMPLIFIER**

**PUZU®**  
—— Inspired Driving ——

Please demand the below portion is filled by the dealer and given to you.

MODE: ..... DATE OF PURCHASE: .....

SERIAL NO.: .....

DEALER'S STAMP:

ISSUE DESCRIPTION:

**PUZU®AUDIO**

WARRANTY VOID WITHOUT THIS CARD

**PUZU®**  
—— Inspired Driving ——

**HUIZHOU SHANGSHUI TECHNOLOGY CO.,LTD**  
3F,Dinsheng Technology Industrial Zone,Pingnan,ZhongKai,HuiZhou GD,CHINA.516006

Designed by USA,Made in China  
[www.puzuaudio.com](http://www.puzuaudio.com)

