

PUZU[®]

—— Inspired Driving ——

PZ-X6800S



For Windows

SCAN TO DOWNLOAD SOFTWARE



For Android

SCAN TO DOWNLOAD SOFTWARE

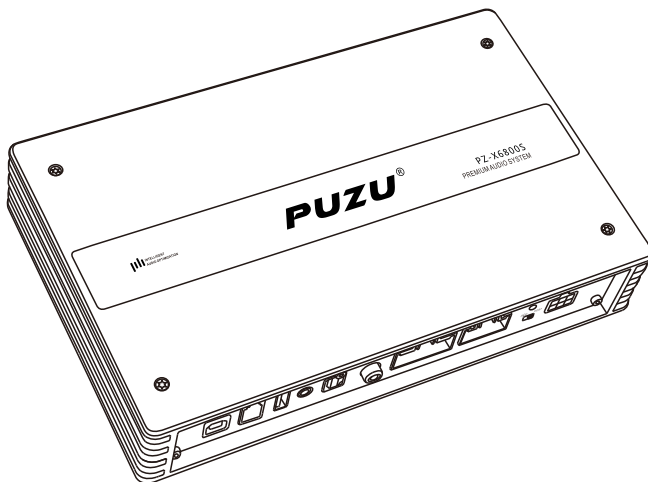
OWNER'S MANUAL&INSTALLATION MANUAL

PZ-X6800S DSP AMPLIFIER USER'S GUIDE

● INTRODUCTION

Congratulations on you purchased of the PUZU PZ-X6800S 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 stunning efficiency.

When installed and configured properly this PZ-X6800S 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 car audio installor.



● ABOUT THE MANUAL AND WARRANTY

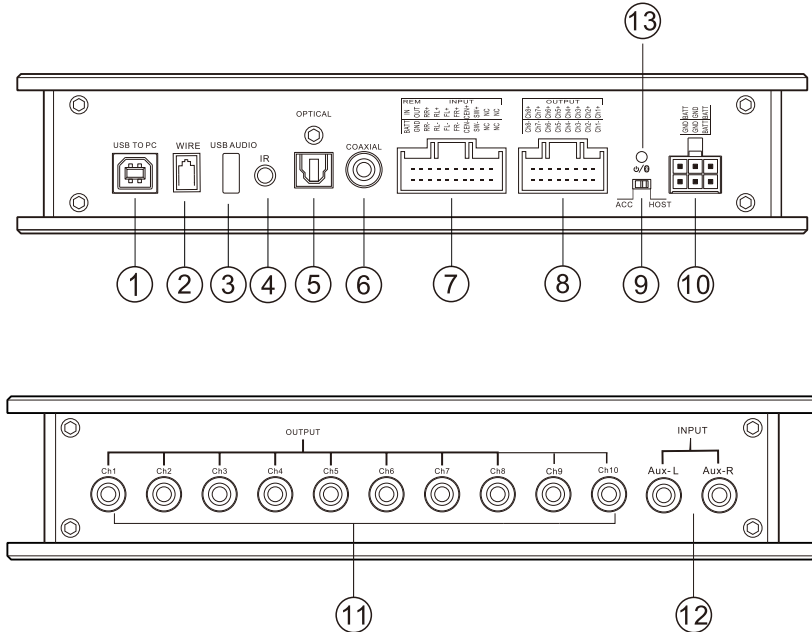
This manual describes the basic requirements to install PZ-X6800S DSP amplifier, the installation and configuration of this amplifier can be complex. If you do not possess the the necessary knowledge, experience and/or tools to perform this installation please contact your local authorized PUZU dealer 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.

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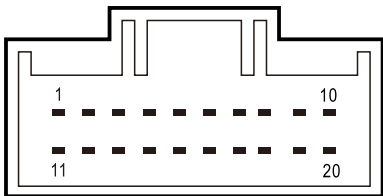


- ① USB TO PC (data cable for sound tuning connection with pc software)
- ② WIRE (Optional LCD remote controller slot)
- ③ USB AUDIO (Play USB disc)
- ④ IR(Optional IR remote receiver slot)
- ⑤ OPTICAL (Optical input slot)
- ⑥ COAXIAL INPUT

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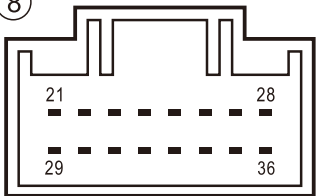
PIN Definition as follows

7



PART A

8

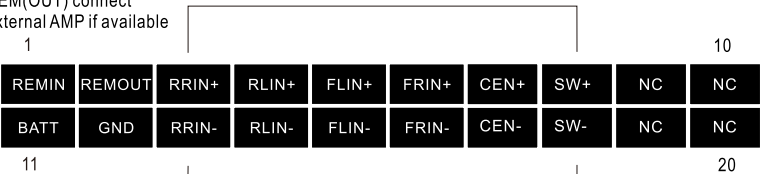


PART B

PART A (Power supply & Speaker input)

REM (IN) ACC
REM (OUT) connect
external AMP if available

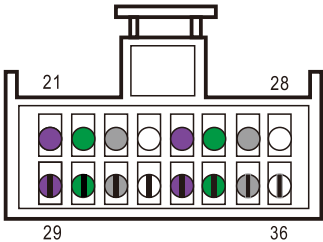
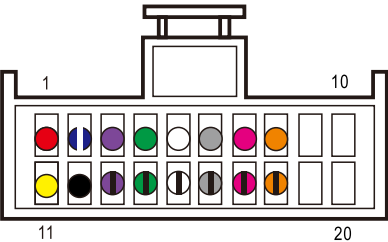
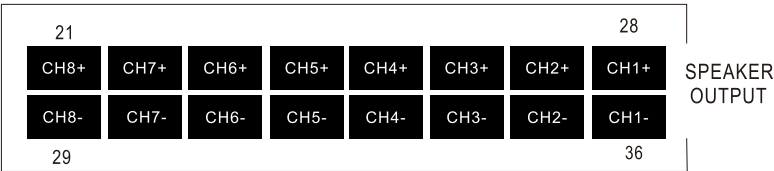
SPEAKER LINE input (high level)



BATTERY & GROUND

SPEAKER LINE input (high level)

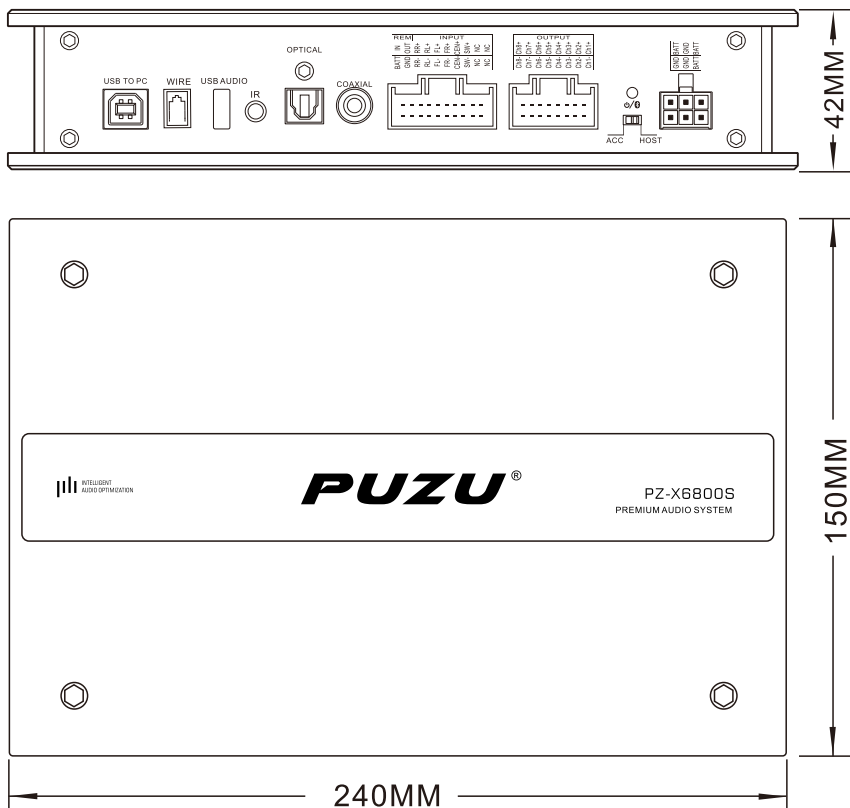
PART B (Speaker output)



PZ-X6800S DSP AMPLIFIER USER'S GUIDE

- ⑨ ACC/HOST This button is DSP star way, please put it HOST side (high level) 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.
- ⑩ EXTERNAL STABLE POWER SUPPLY (you can connect this cable to get more stable power supply, especially when you use this device with RCA in and RCA out)
- ⑪ RCA OUTPUT CH1~CH10
- ⑫ RCA (AUX-L, AUX-R) INPUT
- ⑬ 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-X6800S DSP AMPLIFIER USER'S GUIDE

Technical Data

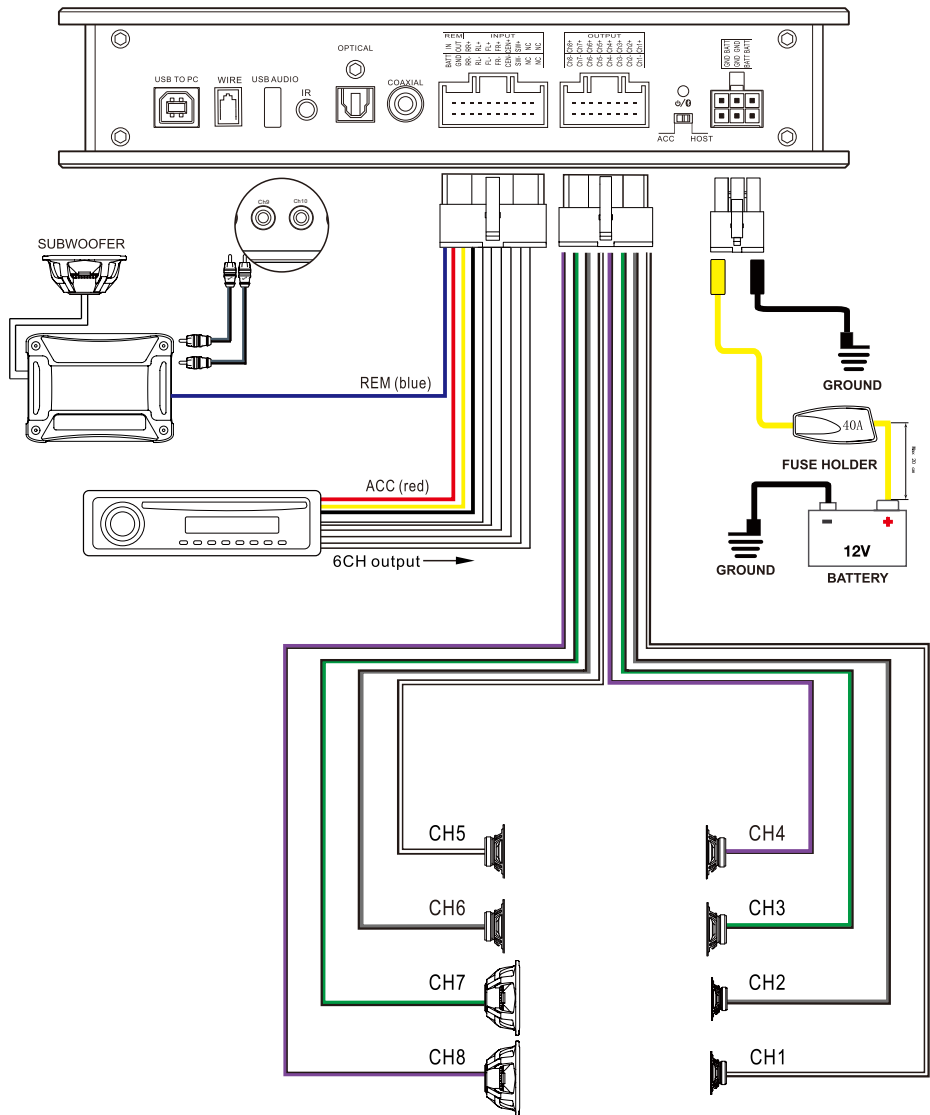
Output power RMS/max	
CH1~CH8 channels 4ohm-----	4x50/150Watts (CH1~CH4)
	4x75/180Watts (CH5~CH8)
CH1~CH8 channels 2ohm-----	4x110/260Watts (CH1~CH4)
	4x150/320Watts (CH5~CH8)
Inputs-----	6xhigh level speaker input
	Optical SPDIF input
	Coaxial input
	USB input
	Bluetooth input
	2CH RCA (AUX-L/R)input
Input sensitivity-----	5-11 Volts
Out puts-----	8x speakers
	10x RCA low level output
Output voltage RCA-----	3~5V
Frequency responds-----	20Hz~20KHz
DSP resolution-----	64bit
DSP power-----	295MHz
S/N-----	>108dB
Isolation-----	>90dB
Working voltage-----	10.5~16Volts
Product size-----	240x150x42(mm)/94.4x59x16.5(inch)
THD-----	<0.015%
Damping factor-----	>100

Sound tuning software main parameters

- Q:0.40~128 0.01 steps
- Gain:-20.0dB~+20dB,0.1dB steps
- High pass,low pass/Phase control
- Specialized type filtering:Butterworth,Linkwitz-Rile,Bessel
- Filter crossover pionts:20Hz-20KHz,1Hz steps
- Slopes:6dB,12dB,18dB,24dB,30dB,36dB,42dB,48dB
- up to 20ms of time aligment per channel,unit (ms,cm,inch)
- Save and share tuning presets (8 presets mode available)
- Input sources:Bluetooth,High-level input,U disc,Analog AUX inputs,OPT.
- Support extra wire LCD remote controller (optional)
- Matrix mixing allows for summing and input/output signal management.
- Android app/Windows softwawre available
- Limiter:0.1dBu~6dBu 0.1dBu steps
- Release Time: Atk*2,Atk*4,Atk*6,Atk*8,Atk*16,Atk*32
- AT.time:0.3ms~100ms 0.1ms steps

PZ-X6800S DSP AMPLIFIER USER'S GUIDE

- ABOUT CONNECTION & DIAGRAM
BASIC CONNECTION



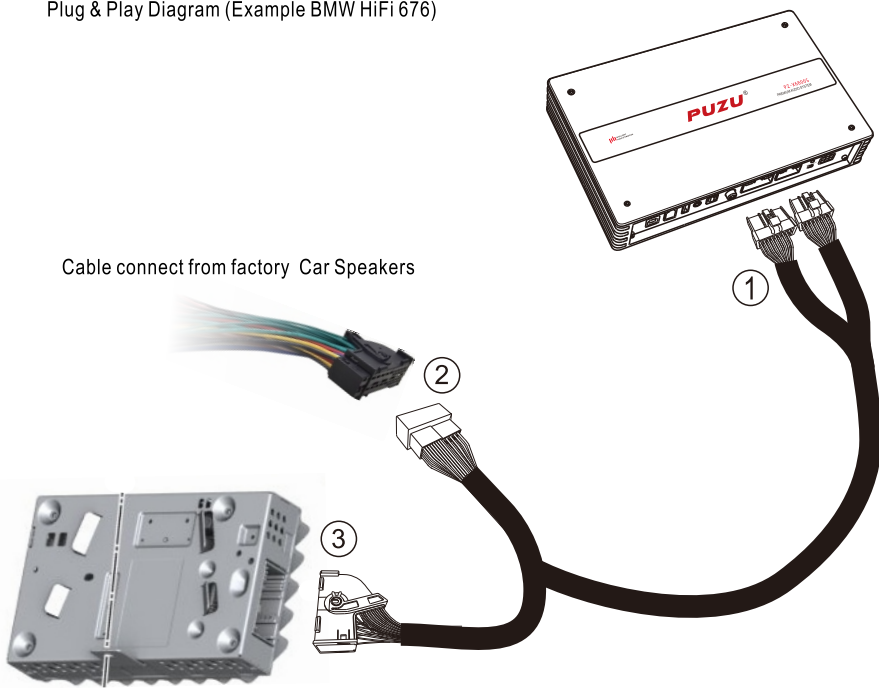
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● PLUG & PLAY CONNECTION



Note: PUZU designed several types of cable support plug & play with some car with premium sound OEM factory amplifier such as BMW (HiFi, Harman Kardon), Mercedes Benz (Burmester), HYUNDAI & KIA (Krell), JBL, Bose, B&O, and so on.

Plug & Play Diagram (Example BMW HiFi 676)



Factory OEM Amplifier

- Steps: 1. Disconnect your factory OEM amplifier cable
2. use PUZU plug & play cable male terminal (3) with your factory OEM amplifier.
3. Connect (1) with PUZU PZ-X6800S
4. Put the DSP under the seat or find a proper place backside of the car.

PZ-X6800S DSP AMPLIFIER USER'S GUIDE

Thank you for choosing PUZU for your Car Audio system and for sharing out philosophy. PUZU PZ-X6800 Car DSP Amplifier software with the best PUZU technology in terms of digital signal processing (DSP)+built in amplifier. Before read ing 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-X6800S installed by your local 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 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

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

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PUZU SOFTWARE USERS GUIDE

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

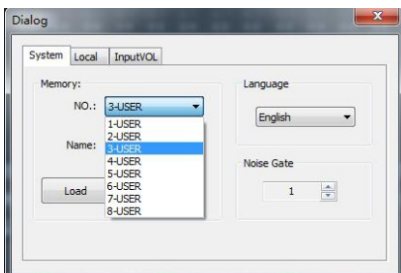
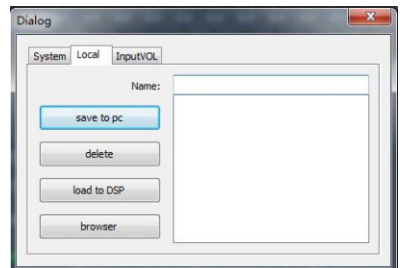


Machine connections & file load

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



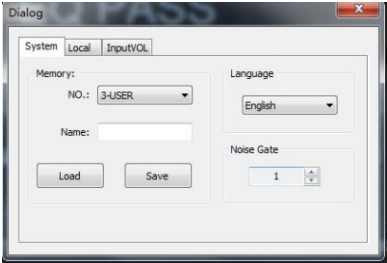
2.You can save the tuning sound datas to built in modes 1~8,or you can save to your local PC,so that you can directly upload the files if you meet the same car and same audio system next time.



3.You can change system language Chinese/English.

4.Share your tuning parameters to other audio system which with the same speaker parameters and car models.

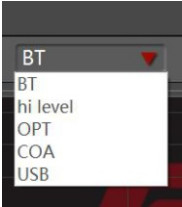
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5.Set a noise Gate,if the input signals is higher than the gate,it could be entered normally,otherwise,it will be blocked.If the gate is set reasonably,the machine will be automatically muted when the system has no signal inut,so as to make system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

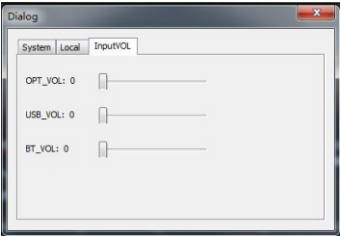
Channel joint

You can free joint any channels from 1~10

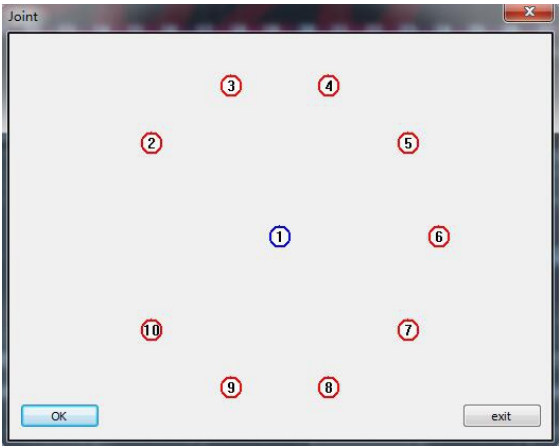


4.Types of sound sources are available for selection:Bluetooth,high level,coaxial,opt,USB,the software set hi level as default.

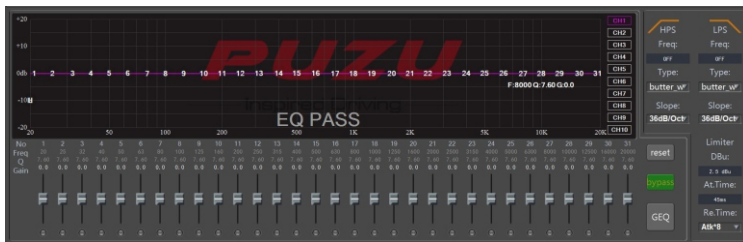
6.select type of sound source from the drop down list.



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

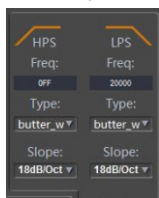


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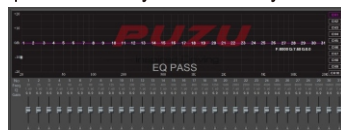


This interface show the main GEQ & PEQ display by tuning 31 bands EQ parameters you can reset and bypass those parameters, and there are some useful parameters like Freq, Q, Gain, which clearly and accurately display.

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



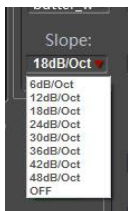
- e. When you press GEQ, you can tuning the EQ by detail parameters you manually set it



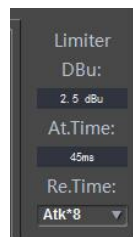
- b. Filter types: butterworth, bassel and linkwitz-riley



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



- 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.

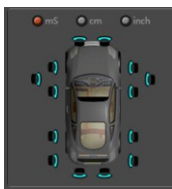


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This interface you can control the main volume for each channels,phase front left/front right/Rear left/Rear right/Center/Sub.

g.you can set all 10 channels time delay parameters seperately,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

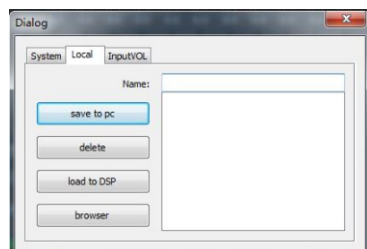
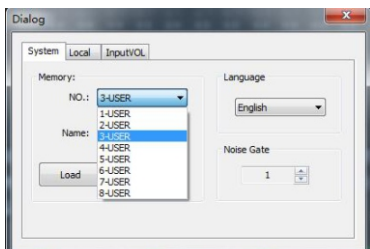
inch:0~272.44inch



h.Mixer interface show as above free choose the source,mix from input1~input6 to out1~out10.



Most importantly,please save tuning parmeters 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.



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ANDROID APP USER'S GUIDE

Download Android apk file from www.puzuaudio.com for free
X6800S built in double mouldle bluetooth



INSTALLATION STEPS OF ANDROID APP



Step1: Press PZ-X6800S
ICO

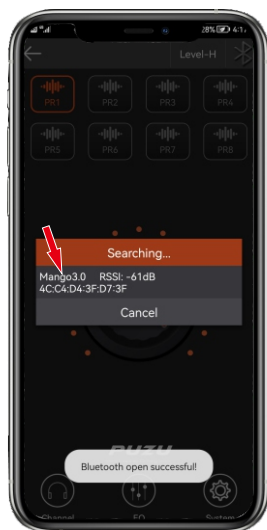


Step2: Press bluetooth logo

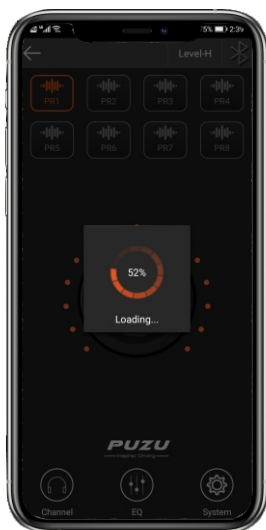


Step3: allow the app open
your bluetooth

PZ-X6800S DSP AMPLIFIER USER'S GUIDE



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



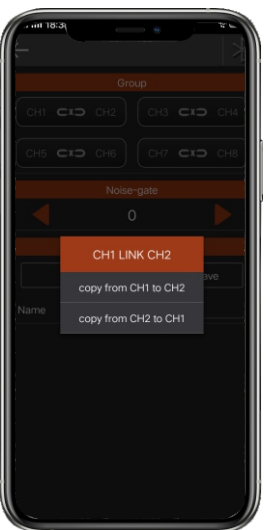
Step5:Waiting loading the date



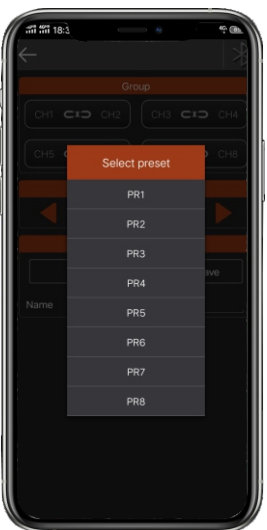
Step6:Success



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

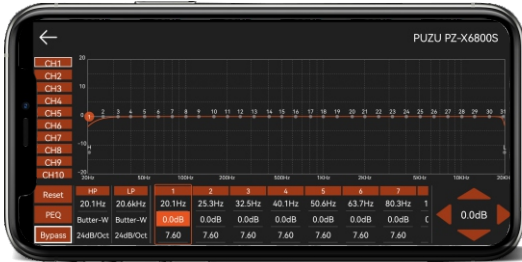


Link:Press the “system”
button you can set the link channel function CH1&CH2 CH3&CH4, CH5&CH6, CH7&CH8



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.

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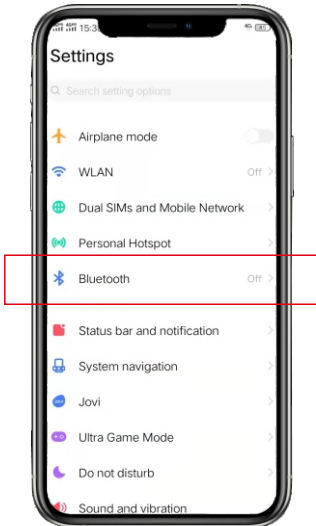


EQ SETTING: You can separate or group setting CH1~CH10 reset/PEQ, GEQ/ Bypass etc functions.

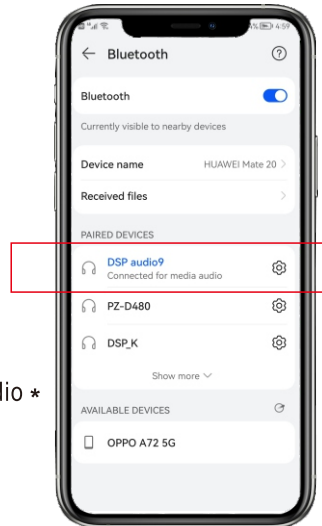
! TIPS

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

PZ-X6800S DSP AMPLIFIER USER'S GUIDE

BEFOR USE 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 toTreble:2KHz~5KHz,
- Treble:7KHz~8KHz,
- Super Treble:8KHz~10KHz,

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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

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 appearance item, user attached antennas, any damage to recordings or recording 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 conditions are violated.

THIS WARRANTY DOES NOT COVER DAMAGE TO PUZU EQUIPMENT CAUSED BY USAGE OF INFERIOR QUALITY WIRING KIT/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

RoHS

CE

FC

