Rebec
CAR AUDIO

CS1212
User Manual

DIGITAL SIGNAL PROCESSOR

INTROUCTION AND TROUBLESHOOTING

Thank you foryourpurchase and welcome tothe world of Rebec! Please keep youroriginalproof ofpurchase orinvoice in a sate place in case ofany warranty claims. Doalso mail orregister your warranty With theofficial Nakamichi service centers and/oragents to ensure thatyou are provided with the relevantfechnical support if required.

NOTICE

1. To prevent short circuit, please keep the device away from water or damp places.
2. If water or any other liquid enters the device, cut off the power immediately, and inform the nearest Nakamichi Service Center or Agent to inspect the product.
3. Users are not recommended to disassemble the device as there are no user serviceable parts inside, please contact the nearest Nakamichi Service Center if necessary.

TROUBLESHOOTING

Ensure all cables and parts are securely connected before turning on the power.Shown below is the basic troubleshooting procedure that you should follow.

When a failure occurs:
Before sending the unit for repair, please refer to the table for common troubleshooting solutions.

→

When it is still not repairable after inspection:
Please return the unit to factory settings

→

Still unable to repair:
Please consult the nearest service center or authorized agent for further aptions

Troubleshooting method:

No.	Malfunction	Reason and Solution
1	No Power	• Check the power connection and make sure it's secure. • Check the ACC connection and make sure it's secure.
2	No Sound	• Double check if the unit is in MUTE mode. • Check if you have choose the correct input channel.
3	Unable to connect through USB	• Check the USB connection and make sure it's secure. • Check if the driver " HID-compliant device " has been properly installed in your PC.

WHAT'S IN THE BOX

CS1212	1Pc
User Manual	
Mechanlcal fat head screws(PM3x6mm)	8Pc
Mounting brackets	4Pcs
24P hgh level input slgnal line(0.2m)	1Pc
24P Speaker cable(0.2m)	1Pc
10P Speaker Power cable 0.2m	1Pc
30A FUSE	2Pcs

2.Amplifier Index

Note. The following indicators and diagrams, using 4Ω load, all use APX515 audio analyzer, indoor ambient temperature is 25°C, and the voltage across the dedicated line power supply is 14.4V.

Parameter	Test condition	Min	Typical	Max	Unit
High input impedance			51		Ω
Low Input Impedance			15K		Ω
High Input voltage	It is formulated according to the pre-amplifier, and when the maximum pre-stage effective value, the power amplifier outputs the maximum power		9.2		Vrms
Low input voltage	It is formulated according to the pre-amplifier, and when the maximum pre-stage effective value, the power amplifier outputs the maximum power		2.5		Vrms
Continuous output power	4Ω load, 1K sine wave, full power continuous load test greater than 20 minutes, THD≤1%, A-weighting		80x10 100x2		W
CH1-CH12 CH1～CH12：Output voltage,maximum	When the corresponding amplifier channel outputs THD<1%, the RAC outputs THD<0.05%.		2.5		Vrms
Frequency	0~ 3dB	20		20K	Hz

THD+N	High level output	4Ω load, 50W output	0.8	%
	CH1~CH12	2Vrms output, AP X515 input impedance 200KΩ	0.05	%
Noise Level	High level output	4Ω load, A weighting	73	dBV
	CH1 ~ CH12	A-weighting, AP X515 input impedance 200KΩ	80	
S/N	High level output	4Ω load, 50W output,1K sine wave,A weighting	95	dB
	CH1 ~ CH12	1Vrms output, AP X515 input impedance200KΩ,A-weighting	95	
Dynamic Range	High level output	4Ω load, 1Kzsine wave,Signal level range-60dB, A-weighting	90	dB
AP X47 Crosstalk	CH1 ~ CH12	1Vrms output, Input Impedance 200KΩ,A weighting	90	dB
	High level output	4Ω load, 50W output,1Kzsine wave,A-weighting	85	
SMPTE	CH1 & CH12	Absolute value	85	%
	High level output	4Ω load, full power output power output frequency1: frequency number 60~250Hz, Frequency 2: 7KHz, Amplitude ratio 4: 1	0.3	
	CH1 ~ CH12	1Vrms output, AP X515 Input Impedance 200KΩ,A weighting	0.05	

3.Interface definition：

1、Color screen in-line interface

2. USB connection PC computer interface

3.U disk interface

4. Bluetooth indicator

5. Low level input

6. RCA1~12 output

7.COAX input

8.Optical input

9.12V power interface

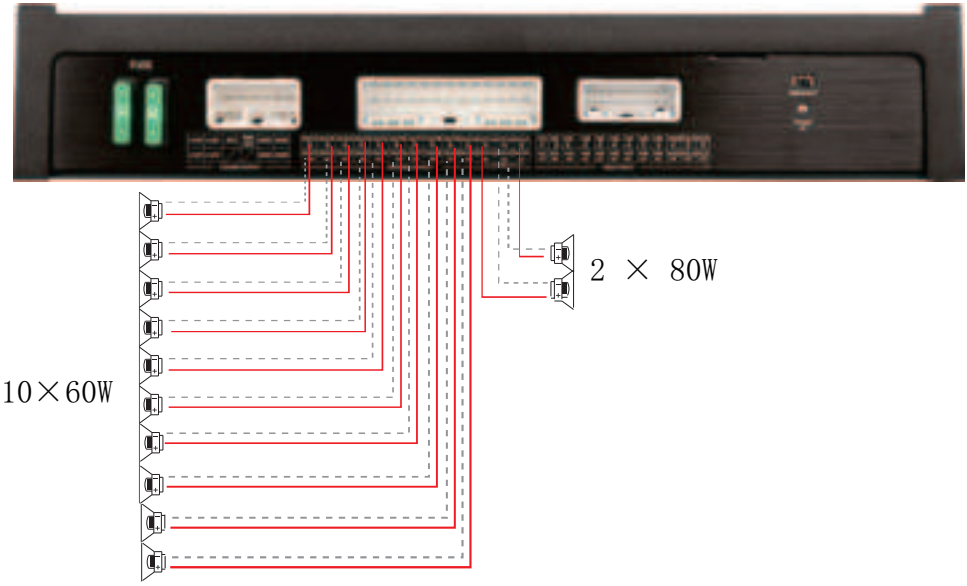
10. 12 high-level outputs

11. high-level inputs

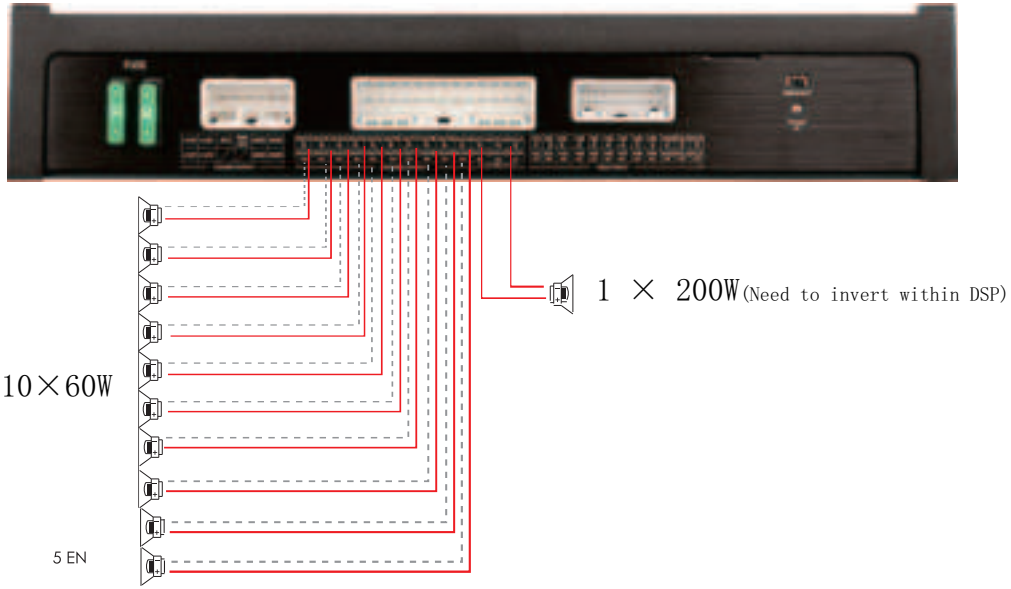
12. Start mode switch

13.Power LED

THE SPEAKER WIRING IN NORMAL MODE



THE SPEAKER WIRING IN BRIDGE MODE



SOFTWARE INTRODUCTION

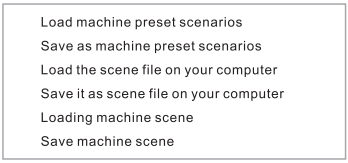
PC Software Operation Introduction

Computer Configuration Requirements: Screen resolution higher than1280 x 768, otherwise the software UI is incomplete, only suitable for windows operation system laptop, desktop and pads.

1. Menu editing area

Main functions: File, options operation.

a. Click the "File" pop-up window, and select to load the scene on you computer, save it as scene on you computer, load the whole machine scene or save the whole machine scene.

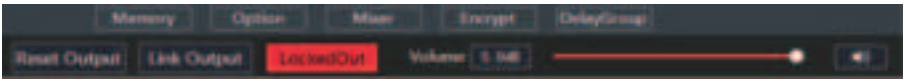


Note: If you need to share tuning parameters, please connect the machine, and "save machine scene" to the personal computer to share this " machine scene".

b. Click on "Option" to select Chinese and English switching, Noise Gate, RESET, InPutVOL and About(A)

SOFTWARE INTRODUCTION

2. Function editing area



Main functions: scene, master source, mixer source, channel type, link, mixer and mode settings.

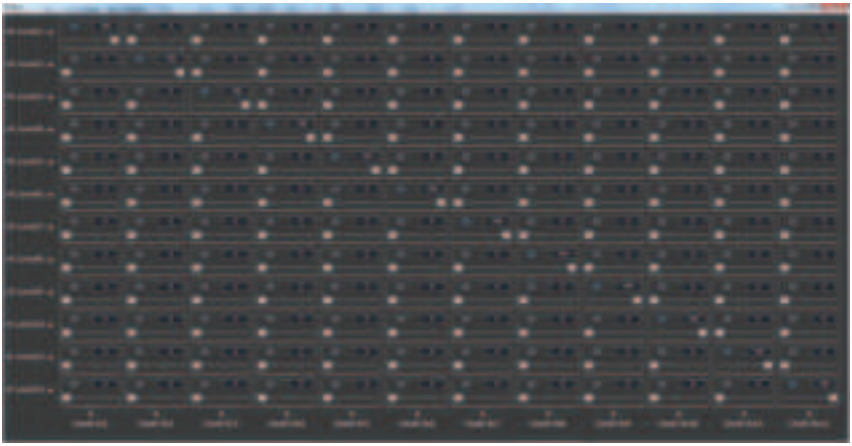
a. Scene: 6 sets of scene data can be recalled or stored.

b. Master source: Click the input audio source drop-down list to select the input audio source. AUX, BT, HI Level, OPT and USB.

c. Reset: Click Reset to clear the channel type or restore the default channel type.

d. Link: Click the Link to set the Link synchronization mode: copy from left to right or copy from right to left.

e. Click "Mixer" to enter the mixing interface, the interface is as shown below.



f. Click "Stereo" to switch between stereo or bridge.

3. Main volume and software connection editing area

Main functions: master volume and computer software connection settings.

a. Main volume adjustment range: off, -59.9~6dB. Click the speaker button to mute the main volume.

b. Click the "Not Connected" button to connect the host with a PC.

4. Output channel type editing area

Main function: configure the type of output channel.

5. Channel delay, volume, phase editing area

a. Push the fader left or right to adjust the sound size, or enter a value or roll the mouse wheel in the volume input box to adjust the sound size. Click the speaker button to switch mute.

b. Positive phase adjustment: Click [0°] or [180°] to switch between positive phase and reverse phase.

c. Delay: set the delay value by scrolling the mouse wheel in the delay input box, or enter the value to set the delay value.

d. Delay Unit button: Click the drop-down list to select milliseconds, centimeters, and inches.

6. Channel divider editing area

Main Function Setup: Channel High & Low Pass Filter Setup.
Adjustable: Filter Type, Frequency point and Q Value (Gradient or Slope).

7. Equalizer editing area

a. Reset EQ: It is used to restore the parameters of the all equalizer to the original pass-through mode (the frequency of the equalizer, the Q value and the gain are restored to the initial value).

b. Restore EQ: Switch between the currently designed equalizer state parameters and the pass-through mode (the gain of all equalization points is restored to 0 dB, the frequency and value are unchanged).

c. Click PEQ Mode to switch GEQ Mode. The Q value and frequency cannot be adjusted in the PEQ Mode interface.

8. Channel EQ editing area

Main function configuration: Equilibrium design of current output channel, 31-band equalization adjustable: frequency, Q value (response bandwidth) and gain (increasing or decreasing the frequency response amplitude near the frequency point).