Rebec CS1212 Digital Signal Processor User Manual

Contents

Rebec CS1212 Digital Signal Processor

Product Specifications

- Model: CS1212
- Mechanical: Fat head screws (PM3x6mm)
- Accessories:
  - Mounting brackets
  - 24P high-level input signal line (0.2m)
  - 24P Speaker cable (0.2m)
  - 10P Speaker Power cable (0.2m)
  - 30A FUSE
- Interface:
  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

Product Usage Instructions

Installation

1. Identify a suitable location for mounting the CS1212.

2. Use the provided fat head screws to secure the mounting brackets in place.
3. Connect the necessary input and output cables as per your audio setup requirements.

Operation

1. Power on the device using the 12V power interface.
2. Select the desired input source using the interface options available.
3. Adjust volume levels and settings as needed.
4. The Power LED will indicate the operational status of the device.

Maintenance
Regularly check and clean the device to ensure optimal performance. Avoid exposing the CS1212 to liquid or extreme temperatures.

INTRODUCTION AND TROUBLESHOOTING

Thank you for your purchase and welcome tothe world of Rebec! Please keep your original proof of purchase or invoice in a sate place in case of any warranty claims.Do also mail or register your warranty with the official Nakamichi service centers and/or agents to ensure that you are provided with the relevant technical 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.

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

Amplifier index

Note: The following indicators and diagrams, using 4Q 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		60x10 80x2		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，APX515 input impedance 200KΩ		0.05		%
Noise Level	High level output	4Ω load， A-weighting		-73		dBv
	CH1～ CH12	A-weighting，APX515 input impedance 200KΩ		-89		
S/N	High level output	4Ω load，50W output,1K sine wave,A-weighting		95		dB
	CH1～CH12	1Vrms output，APX515 input impedance200KΩ,A-weighting		95		
Dynamic Range AES17	High level output	4Ω load，1Ksine wave,Signal level range-60dB，A-weighting		90		dB
	CH1～CH12	1Vrms output，input impedance 200KΩ,A-weighting		90		
Crosstalk	High level output	4Ω load，50W output,1Ksine wave,A-weighting，		85		dB
	CH1 & CH12	Absolute value		85		

SMPTE	High level output	4Ω load，half power output power output，Frequency1： frequency sweep 40~1kHZ，Frequency 2：7kHZ，Amplitude ratio 4：1.		0.3		%
	CH1～CH12	1Vrms output，APX515 input impedance 200KΩ,A-weighting		0.05		

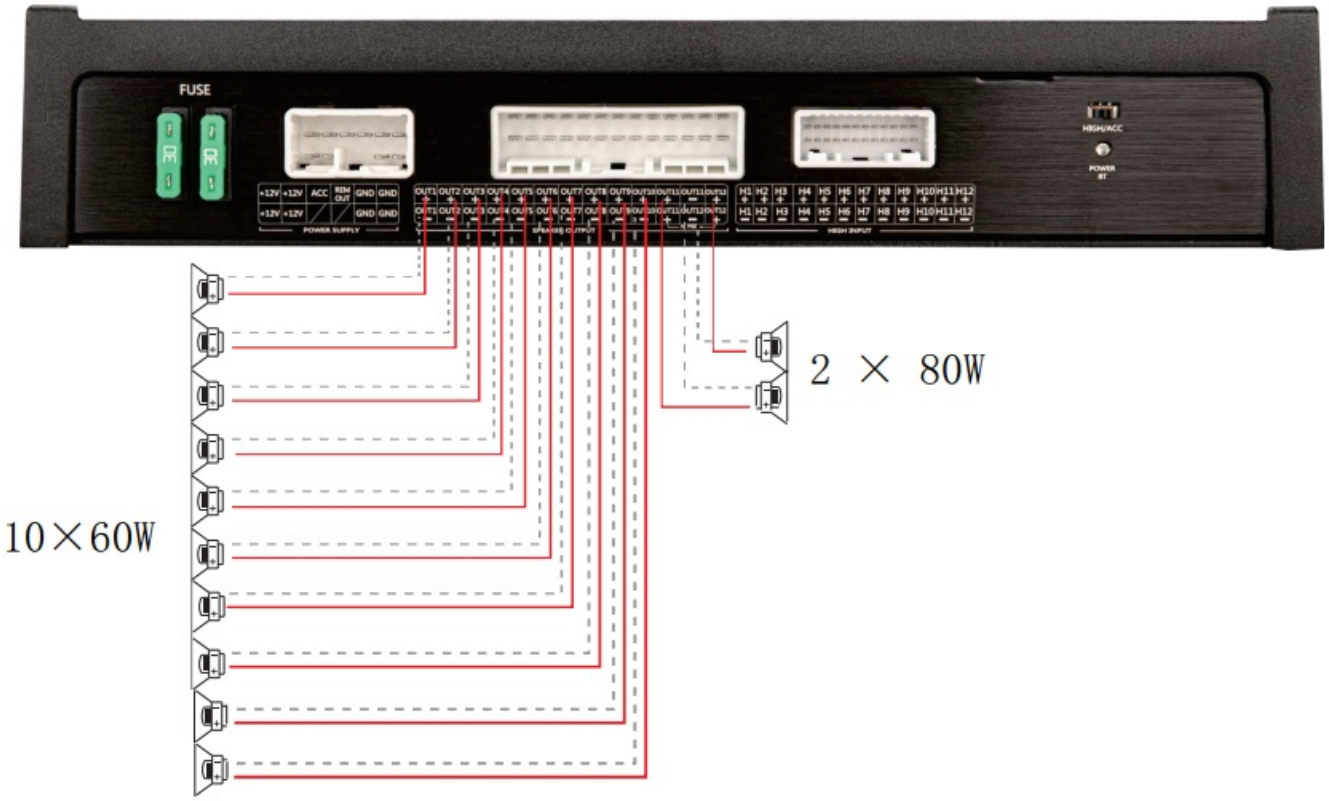
Interface definition

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

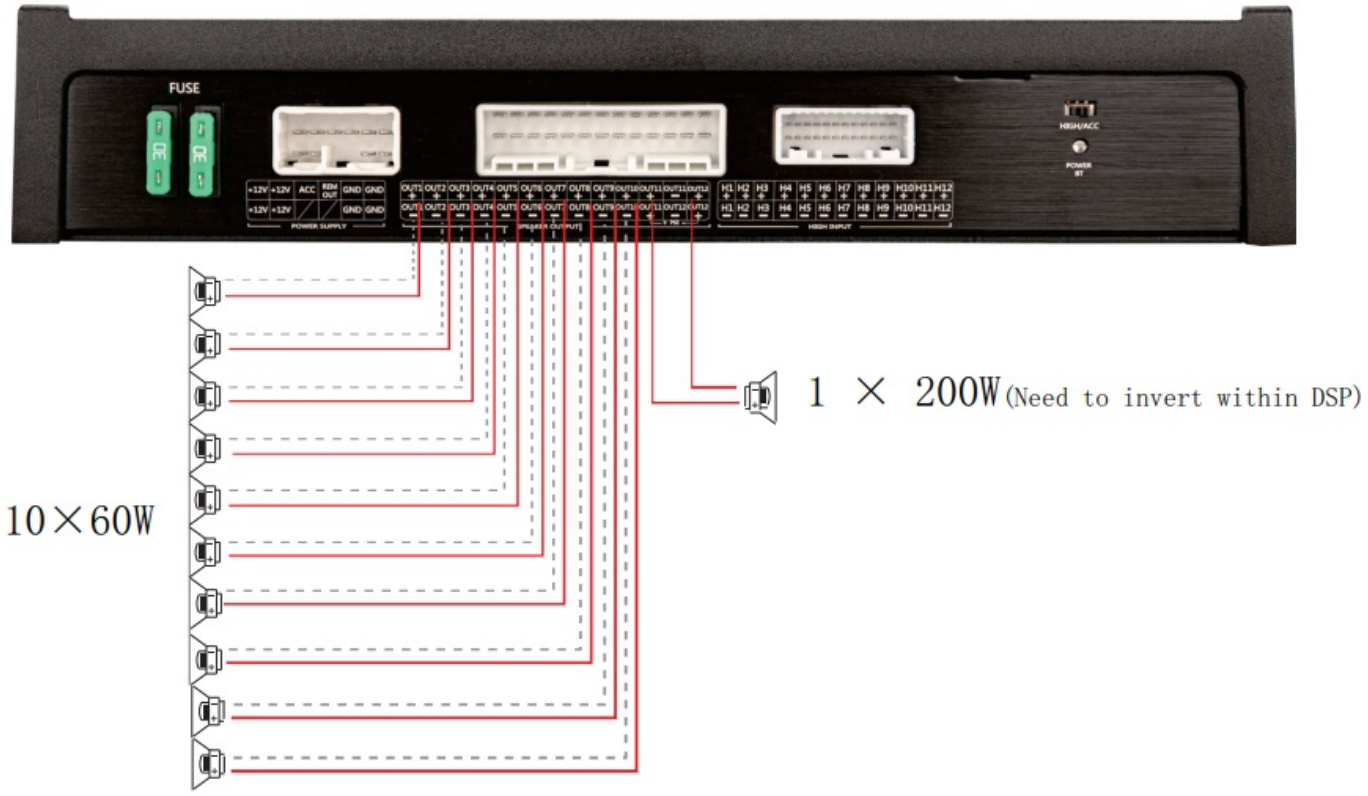
8. Optical input
9. 12V power interface
10. 12 high-level outputs
11. high-level inputs
12. Start mode switch
13. Power LED

SPEAKER WIRING

THE SPEAKER WIRING IN NORMAL MODE



THE SPEAKER WIRING IN BRIDGE MODE



SOFTWARE INTRODUCTION

PC Software Operation Introduction

Computer Configuration Requirements: Screen resolution higher than 1280 x 768, otherwise the software UI is incomplete, only suitable for windows operation system laptop, desktop and pads.

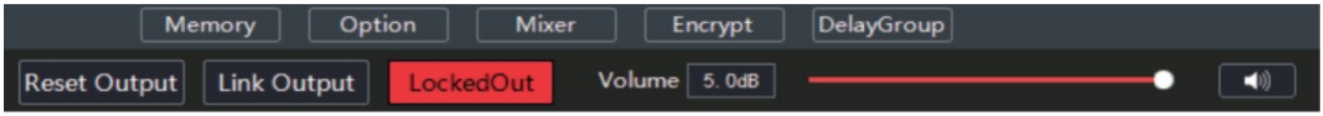
1. **Menu editing area**

Main functions: File, options operation.

- 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.
    - Load machine preset scenarios
    - Save as machine preset scenarios
    - Load the scene file on your computer
    - Save it as scene file on your computer
    - Loading machine scene
    - Save machine scene

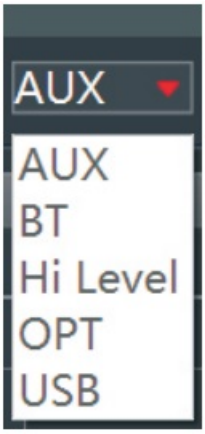
      Note: If you need to share tuning parameters, please connect the machine, and “save machine scene” to the personal computer to share this ” machine scene”.
- Click on “Option” to select Chinese and English switching, Noise Gate, RESET, InPutVOL and About (A)

2. **Function editing area**

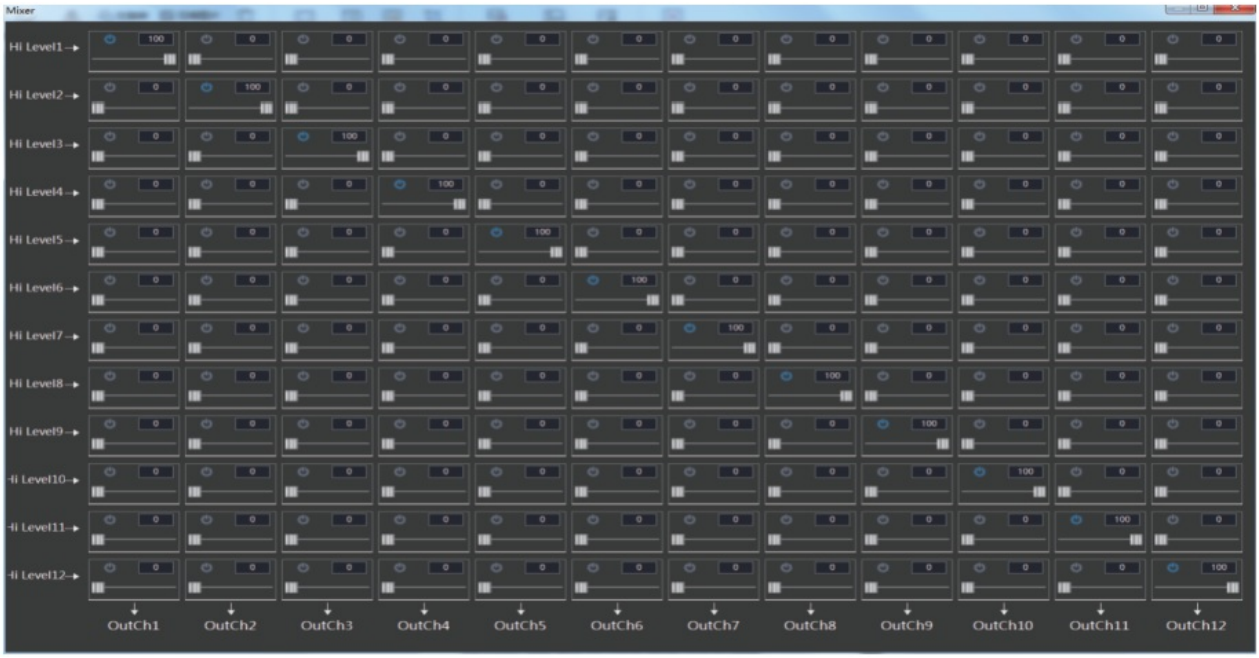


Main functions: scene, master source, mixer source, channel type, link, mixer and mode settings.

- **Scene:** 6 sets of scene data can be recalled or stored.
- **Master source:** Click the inout audio source drop-down list to select the input audio source. AUX, BT, HI Level, OPT and USB.

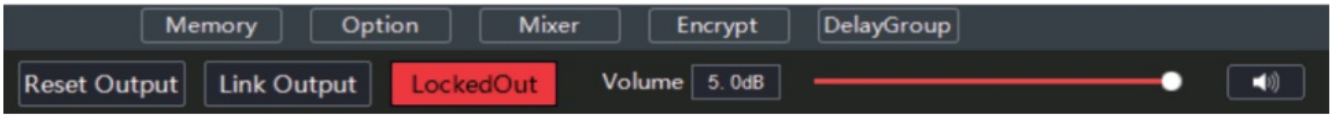


- **Reset:** Click Reset to clear the channel type or restore the default channel type.
- **Link:** Click the Link to set the Link synchronization mode: copy from left to right or copy from right to left.
- **Click** “Mixer” to enter the mixing interface, the interface is as shown below.



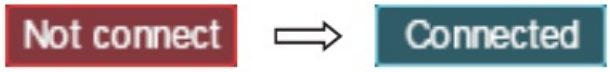
- Click “Stereo” to switch between stereo or bridge.

3. **Main volume and software connection editing area**



Main functions: master volume and computer software connection settings.

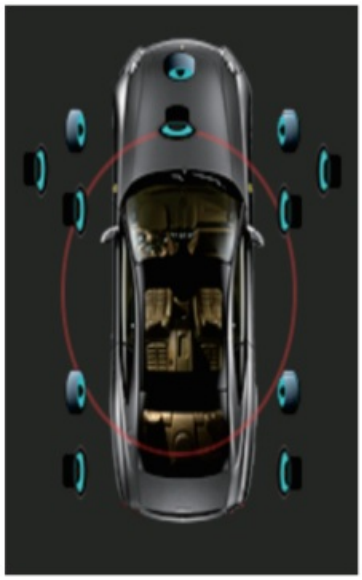
- **Main volume adjustment range:** off, -59.9~6dB. Click the speaker button to mute the main volume.
- Click the “Not Connected” button to connect the host with a PC.



4. **Output channel type editing area**

Main function: configure the type of output channel.

5. **Channel delay, volume, phase editing area**



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

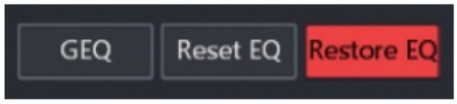
- **Delay:** set the delay value by scrolling the mouse wheel in the delay input box, or enter the value to set the delay value.
- **Delay Unit button:** Click the drop-down list to select milliseconds, centimeters, and inches.

6. **Channel divider editing area**

Main Function Setup: Channel High & Low Pass Filter Setup.

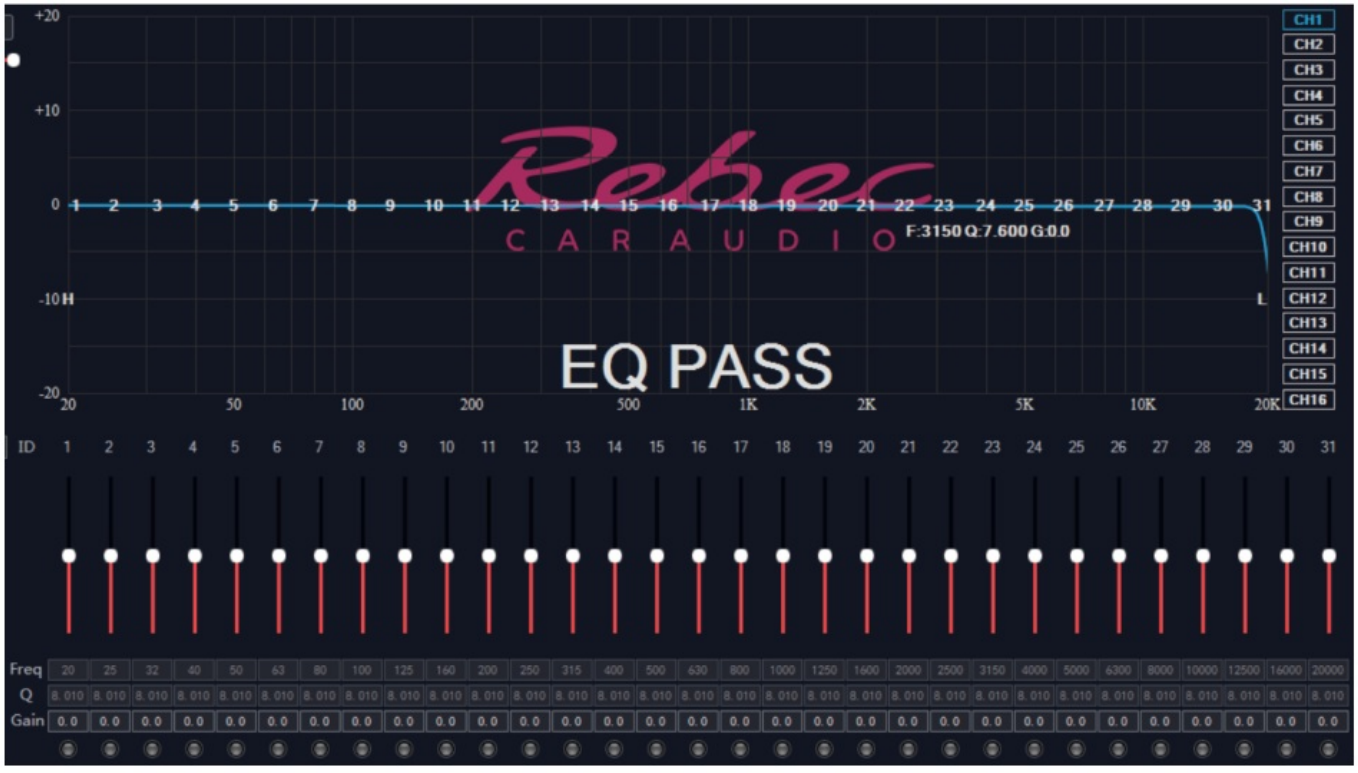
Adjustable: Filter Type, Frequency point and Q Value (Gradient or Slope).

7. **Equalizer editing area**



1. **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).
2. **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).
3. 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).

Frequently Asked Questions

Q: How do I register my warranty for the CS1212?
A: To register your warranty, please contact the official Nakamichi service centers or agents with your proof of purchase or invoice.

Q: What should I do in case of warranty claims?
A: Keep your original proof of purchase safe and reach out to the authorized service centers for assistance with any warranty claims.

Documents / Resources

	Rebec CS1212 Digital Signal Processor [pdf] User Manual CS1212 Digital Signal Processor, CS1212, Digital Signal Processor, Signal Processor, Process or

References

- User Manual