



CS810  
User Manual



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**DIGITAL SIGNAL PROCESSOR**

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## INTRODUCTION AND TROUBLESHOOTING

Thank you for your purchase and welcome to the world of Rebec! Please keep your original proof of purchase or invoice in a safe 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 Rebec 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 Rebec 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	<ul style="list-style-type: none"> <li>• Check the power connection and make sure it's secure.</li> <li>• Check the ACC connection and make sure it's secure.</li> </ul>
2	No Sound	<ul style="list-style-type: none"> <li>• Double check if the unit is in MUTE mode.</li> <li>• Check if you have choose the correct input channel.</li> </ul>
3	Unable to connect through USB	<ul style="list-style-type: none"> <li>• Check the USB connection and make sure it's secure.</li> <li>• Check if the driver " HID-compliant device " has been properly installed in your PC.</li> </ul>

### WHAT'S IN THE BOX

CS810	1Pc
User Manual	
16P high level input signal line(0.14m)	1Pc
16P Sperate cable (0.14m)	1Pc
8 P Speaker Power cable(0.14m)	1Pc
USB cable(1.5m)	1Pc

## 2.Amplifier index

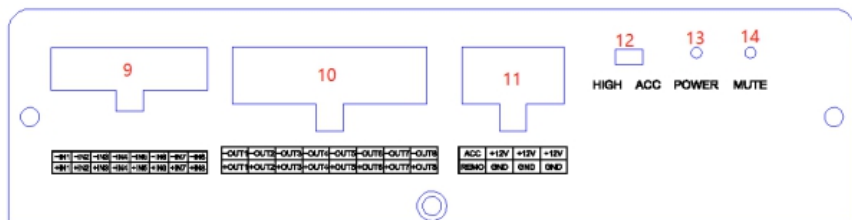
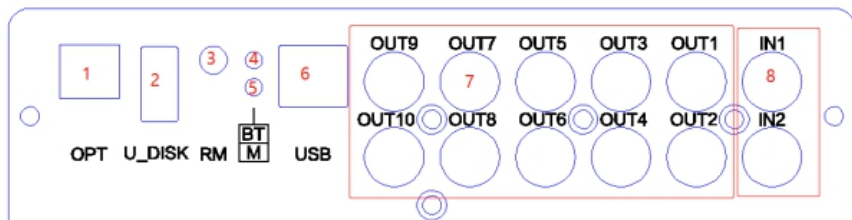
Note: The following indicators and diagrams, using 4Ω load, all use APX515 audio analyzer, indoor ambient temperature is 25°C, and the voltage across the dedicated line power supply is 14.4V。

Parameter		Test condition	Min	Typical	Max	Unit
High input impedance				22		Ω
Low input impedance				15K		Ω
High input voltage		It is formulated according to the <u>pre-amplifier</u> , and when the maximum <u>pre-stage</u> effective value, the power amplifier outputs the maximum power		6.8		Vrms
Low input voltage		It is formulated according to the <u>pre-amplifier</u> , and when the maximum <u>pre-stage</u> effective value, the power amplifier outputs the maximum power		0.75		Vrms
Continuous output power		4Ω load, 1K sine wave, full power continuous load test greater than 20 minutes, THD<1%, A-weighting		50		W
CH1~CH10 CH1 ~ CH10, Output voltage,maximum		When the corresponding amplifier channel outputs THD<1%, the RAC outputs THD<0.05%.		2		Vrms
Frequency		0~3dB	20		20K	Hz
THD+N	High level output	4Ω load, 50W output		0.8		%
	CH1~CH10	2Vrms output, APX515 input impedance 200KΩ		0.05		%

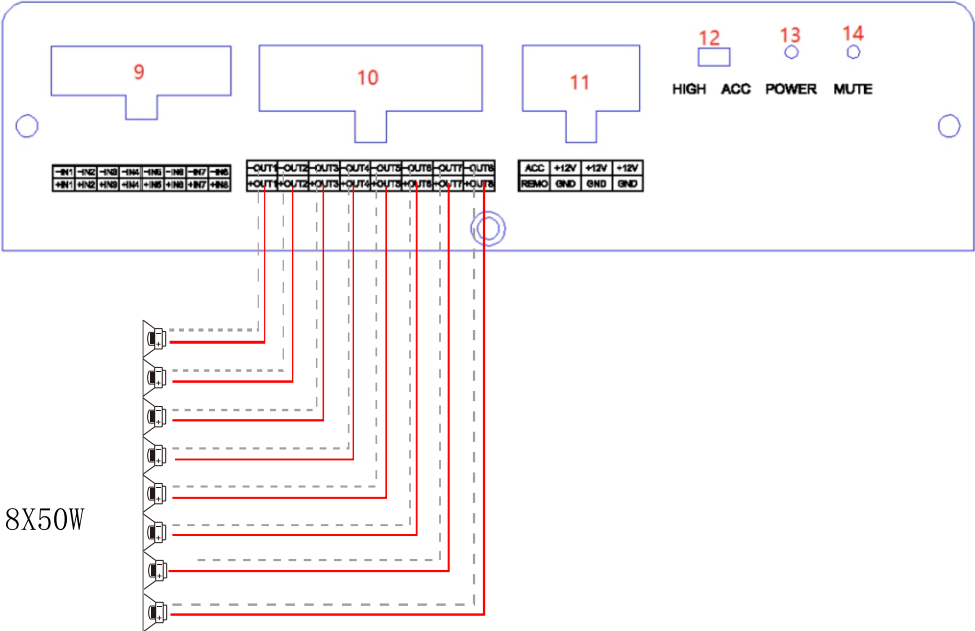
Noise Level	High level output	4Ω load, A-weighting		-73		dBv
	CH1 ~ CH8	A-weighting, APX515 input impedance 200KΩ		-89		
S/N	High level output	4Ω load, 50W output, 1K sine wave, A-weighting		95		dB
	CH1 ~ CH10	1Vrms output, APX515 input impedance 200KΩ, A-weighting		95		
Dynamic Range AES17	High level output	4Ω load, 1K sine wave, Signal level range -60dB, A-weighting		90		dB
	CH1 ~ CH8	1Vrms output, input impedance 200KΩ, A-weighting		90		
Crosstalk	High level output	4Ω load, 50W output, 1K sine wave, A-weighting,		85		dB
	CH1 & CH8	Absolute value		85		
SMPTE	High level output	4Ω load, half power output power output, Frequency 1: frequency sweep 40~1kHz, Frequency 2: 7kHz, Amplitude ratio 4: 1.		0.3		%
	CH1 ~ CH8	1Vrms output, APX515 input impedance 200KΩ, A-weighting		0.05		

### 3.Interface definition:

- 1、Optical input
- 2、U disk interface
- 3、Color screen in-line interface
4. Bluetooth indicator
5. Mode light
6. USB connection PC computer interface
7. RCA1~10 output
8. Low level input
9. 8 high-level inputs
10. 8 high-level outputs
- 11,.12V power interface
12. Start mode switch
- 13、Power LED
- 14、 Mute the indicator light



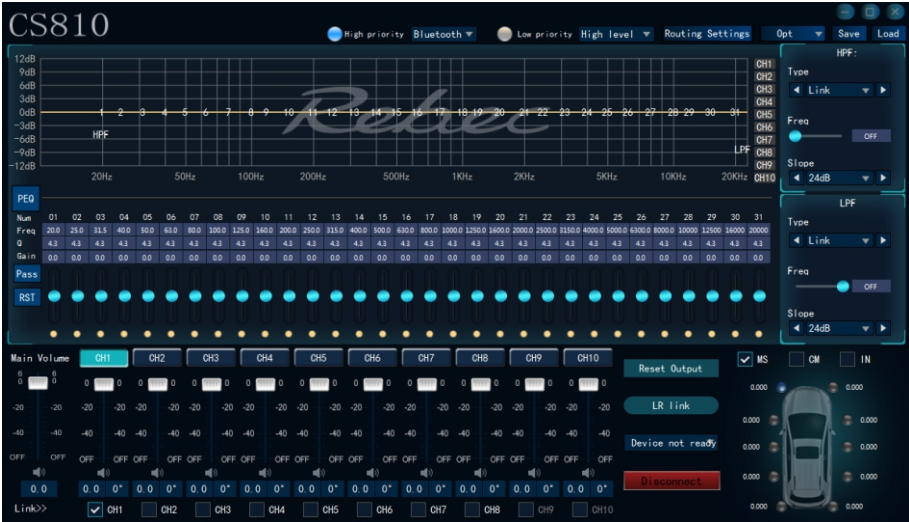
# THE SPEAKER WIRING IN NORMAL MODE



# 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

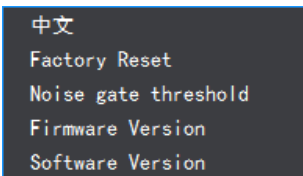
#### Main functions: Opt, Save, Load

- Click the Save or Load pop-up window, and select to load the scene on your computer, save it as a scene on your 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".

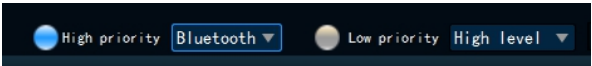
- Click on "Opt" to select Chinese and English, Factory Reset, Noise gate threshold...



# SOFTWARE INTRODUCTION

## 2. Function editing area

- a.CS810 is for digital and analog signal split-screen input  
Select through High priority and Low priority



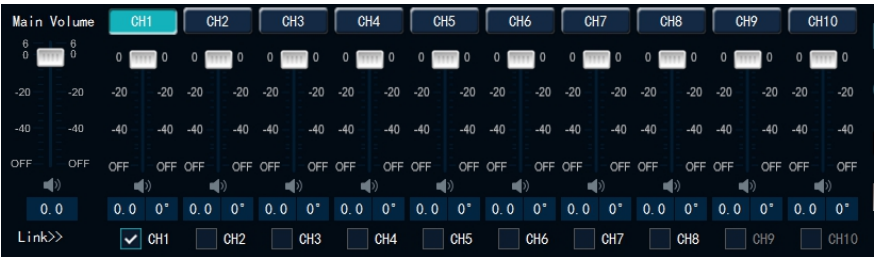
- b.Click “Routing Settings” Enter Mixing Settings

Routing Settings										
	CH-1	CH-2	CH-3	CH-4	CH-5	CH-6	CH-7	CH-8	CH-9	CH-10
IN-1										
IN-2										
IN-3										
IN-4										
IN-5										
IN-6										
IN-7										
IN-8										

## 3. Main volume and software connection editing area

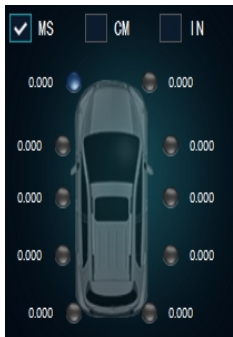
Main functions: master volume and computer software connection settings.

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



# SOFTWARE INTRODUCTION

## 5.Channel delay editing area



## 6. Channel divider editing area



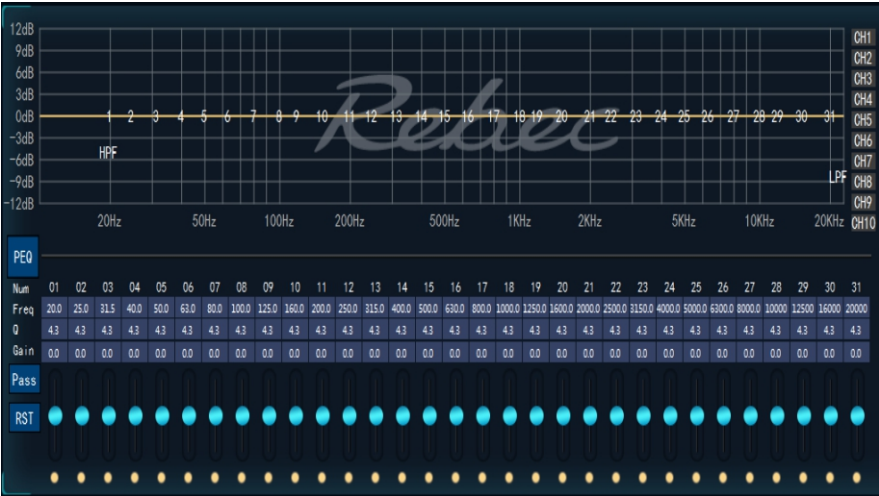
Main Function Setup: Channel High & Low Pass Filter Setup.  
Adjustable: Filter Type, Frequency point and Q Value (Gradient or Slope).

## 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.

# SOFTWARE INTRODUCTION

## 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).