



CS810
User Manual



DIGITAL SIGNAL PROCESSOR

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	• 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

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

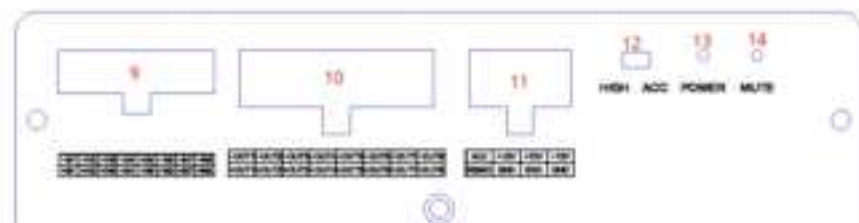
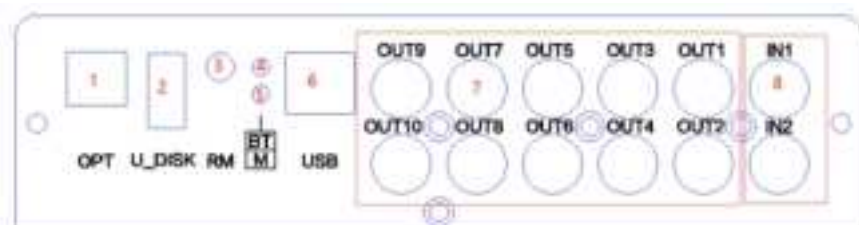
Note: The following indicators and diagrams, using 40 load, all use APX515 audio analyzer, indoor ambient temperature is 25℃, and the voltage across the dedicated line power supply is 14.4V.

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 pre-amplifier, and when the maximum pre-stage effective value, the power amplifier outputs the maximum power		6.8		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		0.75		Vrms
Continuous output power		40 load, 1K sine wave, full power continuous load test greater than 20 minutes, THD<1%, A weighting		50		W
CH1~CH10 Output voltage, maximum		When the corresponding amplifier channel outputs THD<1%, the THD outputs THD<0.05%.		2		Vrms
Frequency		0~20KHz	20		20K	Hz
THD+N	High level output	40 load, 150W output		0.8		%
	CH1~CH10	250ms output, APX515 input impedance 20KΩ		0.05		%

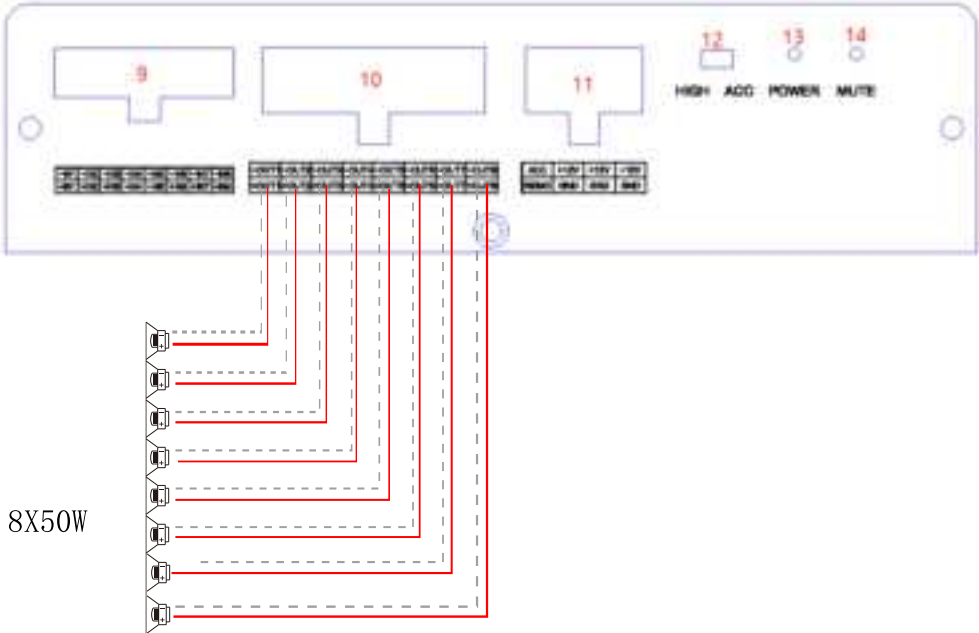
Noise Level	High level output	40 loads - A-weighting		-40	dB
	CH1 - CH10	A weighting, APX515 Input Impedance 200kΩ		-40	
S/N	High level output	40 loads, SMP2 output, 100ms wave, A-weighting		85	dB
	CH1 - CH10	1Vrms output - APX515 input impedance 200kΩ, A-weighting		95	
Dynamic Range	High level output	40 loads - 100ms wave, Signal level range 60dB, A-weighting		80	dB
	AES17	1Vrms output - input impedance 200kΩ, A-weighting		80	
Crosstalk	High level output	40 loads, SMP2 output, 100ms wave, A-weighting		115	dB
	CH1 & CH10	Absolute value		115	
SMP21	High level output	40 loads - full power output, probe output, 1 frequency 1 - frequency sweep 40 - 100 MHz frequency 2 : 70 MHz, Amplitude ratio 4 : 1		0.3	%
	CH1 - CH10	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.

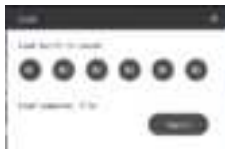


English

1. Menu editing area

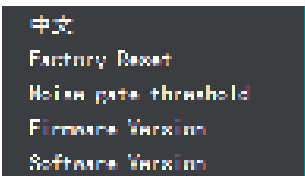
Main functions: Opt, Save, Load

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

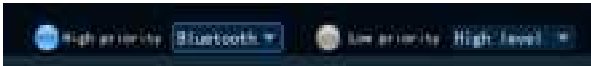
- b. Click on "Opt" to select Chinese and English, Factory Reset, Noise gate threshold...



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



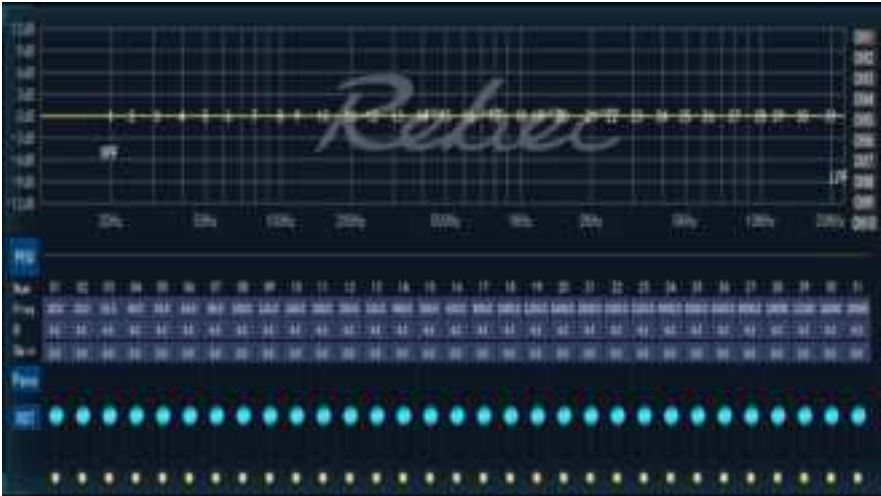
Main Function Setup: Channel High & Low Pass Filter Setup.
Adjustable: Filter Type, Frequency point and Q Value (Gradient or Slope).

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).