

# SQ-8 manual

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## Operating instructions



### Warning

This sign indicates an important warning that serious injury or death may result if not paid attention.

Please stop using immediately when there is a problem

Please send this product back to the designated dealer or nearby repair station for testing.

Do not use any features that will distract you from driving

Any machine function operation that affects attention must wait until the car is completely stopped. To use these functions, it is necessary to park the vehicle in a safe area first, otherwise, accidents may occur

The volume must be kept at a level where the noise outside the vehicle can be heard while driving

If the volume is too loud to make the warning sounds of emergency vehicles and road warning signals (train intersections, etc.) inaudible, it is dangerous and may cause accidents; playing music at a high volume in the car may also cause hearing damage.

Do not decompose or transform

Otherwise, accidents, fire or electric shock may occur.

Do not let children touch small objects such as bolts or screws

Swallowing small objects can cause serious injury. If swallowed by mistake, please call a doctor immediately.

Please apply this product to 12V battery car

The application of other types of vehicles may cause fire, electric shock or other injuries.



### Pay attention to

This sign indicates an important warning that injury or damage to the equipment may occur if you do not pay attention.

## Safety

### Product cleaning

Please use a dry soft cloth to clean the product regularly. If the dirt is difficult to remove, please wet the soft cloth with water only. Any other solvent may dissolve the product.

### Temperature

Before starting the machine, make sure that the temperature in the car is between  $-20^{\circ}\text{C}$  and  $+60^{\circ}\text{C}$

### Repair

If you encounter problems during use, please do not handle them by yourself. Please return this product to the designated dealer or nearby repair station for inspection or repair

### Install

Make sure the product is not installed in any of the following places:

- Near direct sunlight and heat sources
- High humidity or near water source
- Dusty place
- Place of violent vibration



### Pay attention to

shall not be responsible for the loss of data, even in the process of using this product.

## Read

## Preparation

SQ-8 machine can be used with supporting wire controller, which can be used to control SQ-8 machine easily, and can also use mobile phone app or computer software to adjust the audio source switch, EQ and data storage or call of sound effect of SQ-8 model. Because the control modes of the three modes are different, they are described in different chapters. The specific function list is as follows:

## Feature List

Catalog		Position		
			APP	PC
Basic operation	Control interface		8	12
	Machine connection		8	13
	Sound source selection		8	13
	Preset Sound Settings		8	14
	Volume adjusting		8	14
Channel operation	Replace the output channel		9	14
	Set Channel EQ		9	14
	Set equalizer		9	15
	Set channel volume and phase		10	15
	Set up frequency divider		10	15
	Configure Output Signal Function		10	16
Delay	Set delay		11	16

## Configuration List

According to the model you purchased, the packing box shall be equipped with the following accessories. In case of any shortage, please inform the dealer or manufacturer as soon as possible.

Parts	Quantity	SQ-8
Data line	1	●

Data line



## Software Instructions

Scan the QR code on the packaging box through the mobile browser to download the mobile APP software installation package, install and unzip it for use. (Note: This APP can only be used on Android 8.1 or above)

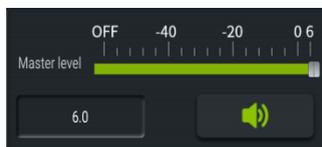
After the SQ-8 tuning software is successfully installed on the mobile phone, turn on the SQ-8 machine, connect to Bluetooth, for the first time, turn on the mobile phone "Settings"→"turn on Bluetooth"→ "search device"→ "SQ-8-BLE"and click Connect .

Then open the SQ-8 mobile software, click "Bluetooth" → enter Bluetooth connection → click "SQ-8 BLE"→ connect the software to the machine.



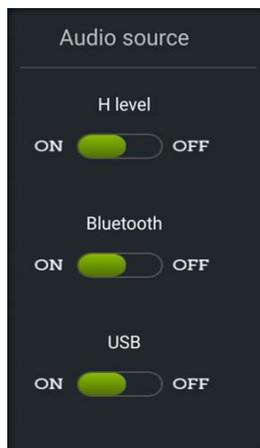
## Volume adjusting

- Main volume size display, volume adjustment control



## Sound source selection

- Click the sound source setting to select the type of input sound source.



## 1、General user interface

### Home page interface

- Built in a variety of brand models sound effect, in the "Car"option can be one key configuration.



For example: the host signal input is high level, and the sound source type is "high level".

## Preset Sound Settings

- There are preset 6 groups of model sound effect data in the machine, which can be directly accessed by the user. M1-M5 is the factory preset sound effect, and M6 is for the user to set and save the sound effect.

## System options

Users can click "SQ-8" in the main interface of the software to enter the system related option settings.



a. [Noise gate threshold] filter the detected audio noise.

In the process of using SQ-8, if a speaker plays audio intermittently you can use this function to obtain the noise gate threshold again. How to use it: adjust the volume of the host to the minimum, click "get", and when a new threshold appears, click "set"

b. [Factory Reset] all data can be restored to factory settings.

c. In the [language] option, you can switch to Chinese / English.

## 2、Professional user interface

Click [Profession] to enter PEQ interface.



## Select Output Channel

●Output channel selection: there are 6 output channels in total. In this area, you can click to select different channel outputs.

## Set Channel EQ

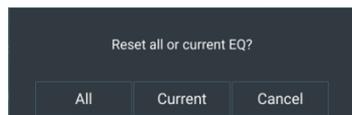
●Each channel has 31 sections of EQ adjustable. Click the frequency to be adjusted to enter the frequency gain and Q value for adjustment.

Q value, gain and frequency can be adjusted by dragging the slider; click the parameter to be adjusted, and the parameter can be adjusted by turning green



## Set equalizer

● Click "All" in [Reset] to reset the parameters of all channels; "Current" to reset the parameters of currently selected channels.



•Click **[EQ Pass]**, the EQ parameter adjusted by the current channel is invalid, but will not be cleared, which is used as the sound effect comparison before and after tuning.



### 3、Click [Channel] to enter the interface

#### Set channel volume and phase

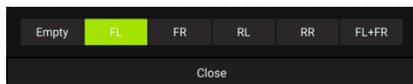
a. Channel output volume setting, click "" to set whether the output channel is mute, and display "" as mute status.

b. Drag slider to set output volume.



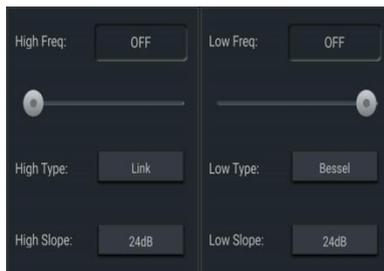
c. Click **[0°]** or **[180°]** to change the output phase of the output channel.

d. Click [] in the channel to select the audio output position of the current channel on.



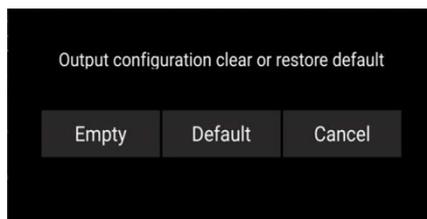
#### Set up frequency divider

- a. Frequency divider: each channel is equipped with independent high pass and low pass filters.
- b. The range of filtering frequency division point is 20Hz ~ 20kHz. You can click the corresponding value to set the frequency
- c. The selection range of filtering slope (slope) is: 12dB / 24dB / 36dB / 48dB
- d. There are three filtering algorithms of "Link ,Bessel and Butter"



#### Configure Output Signal Function

• Click **[Reset]** to select the current channel output position to clear or restore the channel default position.



•Click [Link] to select custom multi-channel joint debugging.

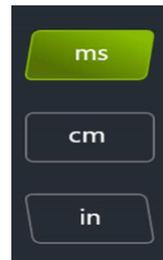


## 4、 Delay Function Settings

a. Precise delay: adjust the delay of sound through addition and subtraction



b. The delay unit is [ms] by default, or [cm] or [in].



c. Click "speaker" to enter the fast setting delay, just drag the "🌀" to quickly delay.



## PC Software Instructions

Scan the QR code on the surface of the box and download it to the computer to install the SQ-8 software. The computer software can adjust the host's audio source switching, EQ, and audio data storage or recall for SQ-8 models.

Remarks: 1. The above mobile software can refer to the computer adjustment mode, and the function of the mobile software is the same as that of the computer software.

2. When the computer is connected to the tuning, it is not possible to use the mobile phone to connect the tuning at the same time. Whether the side will cause confusion and loss of parameters.

## 1、Precautions for software installation

•Software can be executed under Microsoft® Windows® system

The recommended configuration is as follows:

Operating system: Windows XP、Windows Vista、Windows 7、Windows 8、Windows 10.

CPU: 1.6GHz Or higher.

Memory card: 1GB or higher.

Hard disk: 512MB or more free space

Computer resolution: 1280 \* 768 or higher

•Before connecting the SQ-8 model to the computer, please install the SQ-8 computer software correctly.

## 2、PC software introduction

### Control interface

The computer software interface can be divided into four areas: A: equalizer area, B: filter area, C: volume control area, D: delay control area

The screenshot displays the SQ-8 software interface with four distinct control areas highlighted by colored boxes:

- Area A (Equalizer):** Features a frequency response graph with a grid. The y-axis ranges from -12dB to 12dB, and the x-axis shows frequencies from 20Hz to 20KHz. A horizontal line is drawn at 0dB. Below the graph is a PEQ section with 31 numbered sliders, each with a 'Gain' value of 0.0 and a 'Pass' button.
- Area B (Filter):** Contains two filter sections, HPF and LPF. Each section has a dropdown menu set to 'Bessel', a 'Type' dropdown, a 'Freq' slider, and a 'Slope' dropdown with options 12dB, 24dB, 36dB, and 48dB.
- Area C (Volume Control):** Shows a 'Main Volume' slider on the left. To the right are four channel volume controls: FL-FR, RL-RR, GEN SUB, and FL-FL-RL-RR. Each channel has a dropdown menu and a volume slider.
- Area D (Delay Control):** Includes a 'Reset Output' button, a 'Delay Custom' button, and a 'Delay Reset' button. Below these is a 'USB1' dropdown and a 'Connected' status indicator. A car diagram shows the speaker layout with volume levels for FL, FR, RL, RR, and SUB.

### 3、PC software operation instructions

#### Function setting

#### Machine connection

a. Before online, the interface displays "Disconnect"; after online successfully, the interface displays "connected".

Disconnect

Connected

#### Sound source selection

Click to select the input source type.

SQ-8 has four kinds of sound source input options, including high-level, Bluetooth, USB sound card can be directly selected in the software, low-level needs to be selected on the machine.

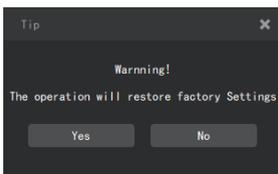
High level Bluetooth USB Audio

#### Function options

a. [Opt] click [English] to display the status of English status text .



b. [Factory Reset] can restore all data to factory settings

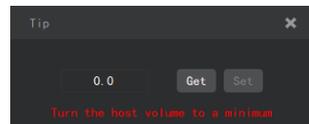


a. [signal gain] gain the signal of the currently selected sound source. .



c. [Noise gate threshold] filter out the detected audio noise (please do not operate by yourself since it has been set at the factory).

In the process of using SQ-8, the user can use this function to obtain the threshold value of noise door again in case of audio interruption played by a speaker. Method of use: turn the volume of the host to the minimum, click "get", and when a new threshold value appears, click "set".



d. [Firmware Version] is used to view the version number of the current machine firmware, and to determine whether the firmware version number needs to be updated.

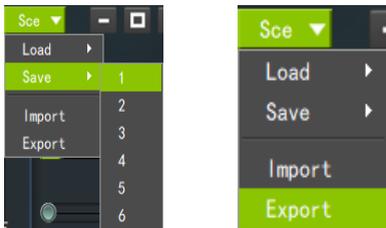


e. [Software Version] is used to view the version number of the current machine software and determine whether the software version number needs to be updated.



## Preset Sound Settings

Click **Save** to save the adjusted sound parameters. The system provides 6 built-in modes for customers to save. (you can also save the sound effect to the computer through **[Export]**)



Click **[Load]** to select the saved sound parameters, or select the sound files saved to the computer through **[Import]**.



## Main volume adjustment

- Editing, adjusting and displaying area of total volume of output signal.

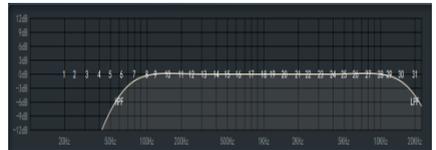


a. Adjust the **main volume**: directly drag the total volume push with the mouse to adjust the total volume, or directly input the value, scroll the mouse wheel and other ways to adjust the total volume, the adjustment range: + 6 ~ - 60.

f. Mute button: click the  button in the main volume setting area to set the total volume mute, and click again to cancel the mute (the mute will be automatically cancelled when adjusting the total volume).

## Set Channel EQ

1. Output signal channel frequency response curve display and frequency division balanced drag editing area.



There are 31 EQ sections that can be adjusted. When the mouse moves to the SN bit, press and hold the left key. Drag up and down to adjust the equalizer gain. Drag left and right to adjust the equalizer frequency. When the mouse moves to the left and right green arrows, press and hold Drag the left mouse button left and right to adjust the Q value of the equalizer; all adjustments will display the parameters of the current equalizer in real time under the serial number, and update the values in the parameter editing area of the equalizer.

2. Parameter display and edit area of output signal channel equalizer.



## Graphic equalization mode

a. **Freq**: in the parametric equalization mode, in the editing area, the frequency can be adjusted by directly inputting the value, scrolling the mouse wheel and the up and down keys on the keyboard (adjustment range: 20Hz ~ 20kHz). In the graphic equalization mode, the frequency is the default 1 / 4 octave frequency distribution .

b. **Q value**: in the parametric equalization mode, in the editing area, you can directly enter the value, scroll the mouse wheel and the up and down keys on the keyboard to adjust the Q value (adjustment range: 0.4 ~ 20); in the graphic equalization mode, the Q value is the default 4.3.

c. **Gain**: in the editing area, it can be adjusted by directly inputting the value, scrolling the mouse wheel and the up and down keys on the keyboard (range: - 12dB ~ + 12dB) .

## Set equalizer

- Equalizer mode



a. Click **[RST]** to return the equalizer parameters of the current channel or all channels to the initial state: uniform frequency distribution, Q value of 4.3, gain of 0dB.

b. Pass through Equalization: click **[Pass]** to turn all equalizers of the current channel into a non start state (**EQ PASS**); click again to turn them into a start state.

Note: this operation will only change the gain of the equalizer.



## Set up frequency divide

- Output signal filter editing area



Frequency setting: the low-pass or high-pass frequency can be adjusted by directly inputting the value, scrolling the mouse wheel, up and down keys on the keyboard, and directly dragging the LPF / HPF on the curve display area. The adjustment range: 20Hz ~ 20KHz.

High pass filter slope: 12dB/24dB/36dB/48dB

Low pass filter slope: 12dB/24dB/36dB/48dB

High / low pass has three filtering algorithms: Link, Bessel and Butter.

## Set channel volume and phase

- Output channel volume, phase editing adjustment and display area.



Normal phase

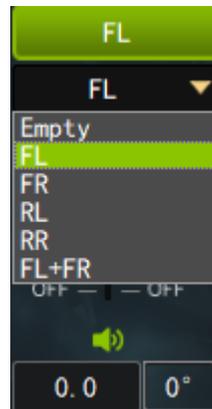
Antiphase

a. Channel volume: you can adjust the channel volume directly by dragging the push button with the mouse, or you can input the value. The volume can be adjusted by the way of the mouse wheel, and the adjustment range is 0 ~ 60.

b. Mute button: click [  ] to mute the channel volume, and click again to cancel the mute (the mute will be automatically cancelled when the volume is adjusted).

c. Click **[0°]** or **[180°]** to change the output phase of the output channel.

d. Each channel can change the audio output position freely.

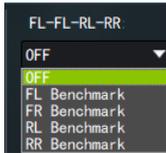


## Configure Output Signal Function

- Click the [FL-FR] to set the front left and right channel joint debugging, and click the [RL-RR] to set the rear left and right channel joint debugging.



- In addition, the front, rear, left and right channels can be jointly adjusted by clicking [FL-FR-RL-RR].

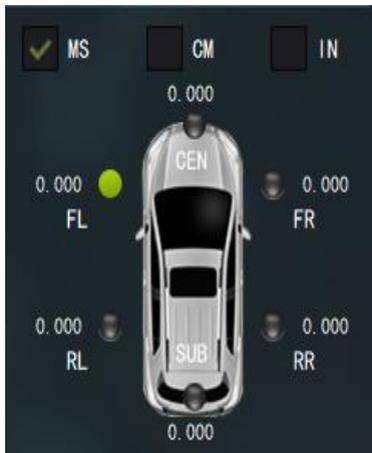


## Set delay

- Output signal delay regulation area

a. Precise delay: you can directly enter the value or scroll the mouse wheel and the up and down keys on the keyboard to adjust the delay time .

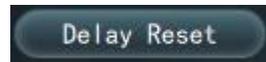
- b. Delay unit: ms, cm, in.



- c. Delay Customization: drag "  " to set the fast delay.



- d. Delay reset: after clicking, the set delay parameters will be cleared.



## 1、Interface introduction

### 1. Power status indicator.

### 2. High / low level input selection.

### 3. Start the selector switch:

When the switch is turned to "ACC" end, ACC will start the machine; when it is turned to "high" end, high level input signal H1 - / H1 + will start the machine.

### 4. DSP 20pin universal interface.

### 5. RCA Audio output interface:

6 sets of RCA Audio signal output, can be connected to external power amplifier or active subwoofer .

### 6. RCA Audio input interface.

### 7. Square USB2.0 Interface:

It can be connected to the computer through USB2.0 cable for detailed tuning operation and settings. It can also be used as a sound source input for equipment with sound card

### 8. Mode indicator.

### 9. Bluetooth mode indicator.

### 10. Head unit.

### 11. SQ-8

### 12. Dual frequency suit horn.

### 13. Coaxial horn.

### 14. Active ultrathin subwoofer.

### 15. DSP special vehicle line.

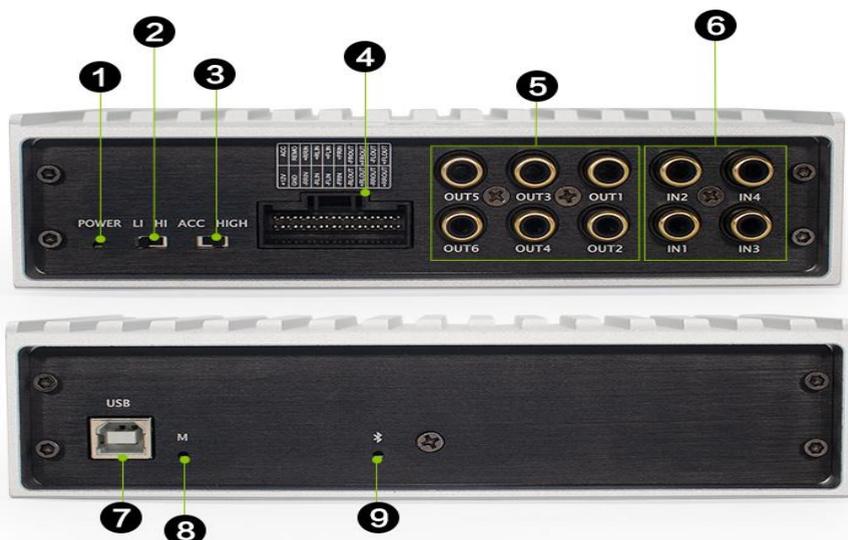
### 16. Connect car amplifier RCA Audio Cable.

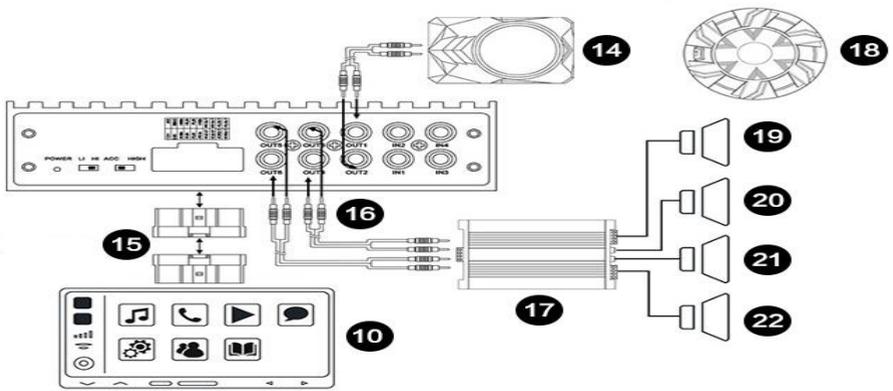
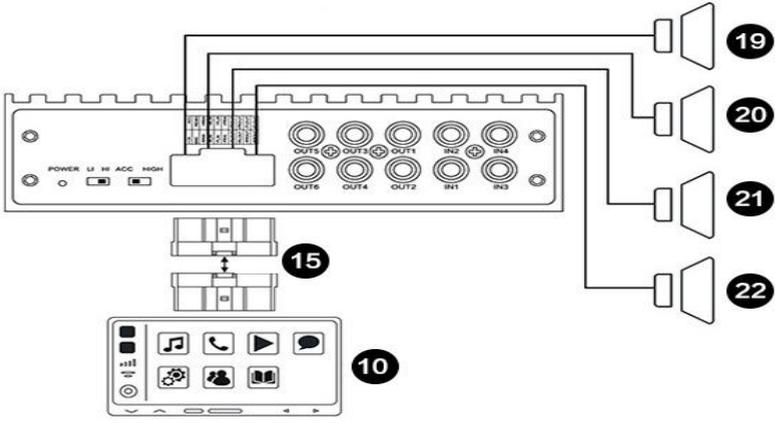
### 17. Car Amplifier.

### 18. Active spare tire subwoofer.

### 19、20、21、22. Car Speakers.

## 2、Connection diagram





## DP-X10 Technical parameter index

### 1、 Technical specifications

RMS@4 $\Omega$	50W*4 (Test voltage 14.4V)
Crosstalk	82dB
Signal to noise ratio	$\geq 107$ dB
Frequency gain	-12dB~+12dB
Frequency response	20Hz~20KHz
Input impedance	Low level input: 15K $\Omega$ ; High level input:10 $\Omega$
Phase position	0°/180°
Start mode	DC High level /ACC Input start
Working temperature	-20~60°C
Storage temperature	-40~85°C
Start high level input	High level start (H1-/H1+)
Activate ACC input	+12V Starting voltage
Power requirements	DC 14.4V (9V~16V) Negative ground
Standby current	750mA
Net weight	1kg(KG)
Volume	160mm (Width) *120mm (Depth) *45mm (Height)

### 2、 Functional parameters

Input signal type	4-channel high level, 4-channel low level, Bluetooth, USB sound card
Output Location	4- power amplifier outputs, 2- RCA outputs
Signal gain	Main volume + 6 ~ - 60
Filter Slope	CH1~CH6 12/24/36/48 dB Oct
Q value	0.4~20
Delay	0.000~20ms/0.000~680cm/0.000~268in
Scene saving	The machine can save 6 preset music scenes

## Components of harmful substances

Name and content of toxic and harmful substances or elements in products

Part Name	Hazardous substances or elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr(VI))	Polybrominated Biphenyls (PBB)	Polybrominated Diphenyl Ethers (PBDE)
Circuit Board Component	×	○	○	○	○	○
Shell Component	○	○	○	○	○	○
Package Components	×	○	○	○	○	○
Attachments	×	○	○	○	○	○

[This form is compiled in accordance with S.J/T 11364.](#)

○ :Indicates that the content of this harmful substance in all materials of this part is within the limits set by GB/T 26572.

×

Indicates that the content of hazardous substances in at least one homogeneous material of the part exceeds the limit set by GB/T 26572

The content of "x" parts exceeds because there is no mature replaceable technology in the industry at present