

ONKYO®

INSTRUCTION MANUAL

使用手冊



R-MS10

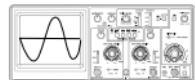
DIGITAL SIGNAL PROCESSOR

音頻處理器



www.onkyocaraudio.com

TOOLS THAT MAY BE NEEDED(DEPENDING ON THE VEHICLE)

Panel Removal Tool	Socket	Electric drill	Torx screwdriver
			
Phillips screwdriver	socket wrench	Wrench	Cord cutters
			
Crimping Tool	Wire strippers	Spectrum analyzer	Oscilloscope
			

PARTS LIST

USB 2.0Wirex1	Ampliflex1	Velcrox1
		
Manualx1		
		

PRECAUTIONS

	Indicates a prohibited action (not allowed)
	Indicates that disassembly is prohibited
	Indicates a mandatory action (must be performed)
	Indicates that your attention should be paid.

WARN

When a problem occurs, please stop using it immediately 

Failure to do so may result in personal injury or damage to the product. Please return this product to an authorized Onkyo dealer or the nearest Onkyo service center for repair

This product is only suitable for vehicles with 12V negative grounded 

Failure to do so may cause accidents such as fire.

Ask professionals for wiring and installation 

Wiring and installation of this product require specialized skills and experience. For the sake of safety, please contact the dealer of the product you purchased for installation

Do not disassemble or modify 

Failure to do so may result in an accident, fire or electric shock

Small objects such as bolts or screws should be kept out of the reach of children 

Swallowing small objects may cause serious injury. If swallowed, seek medical attention immediately.

Do not use any features that distract you while driving  

Any operation of machine functions that interfere with attention must be done only after the vehicle has come to a complete stop. Before using these functions, be sure to park the vehicle in a safe area first. Otherwise, accidents may result.

THE VOLUME MUST BE KEPT AT A LEVEL WHERE YOU CAN STILL HEAR OUTSIDE NOISE WHILE DRIVING

Failure to hear emergency vehicle sirens and road warning signals (train crossings, etc.) is very dangerous and may lead to accidents. In addition, excessive volume may cause hearing damage.

PROHIBITED

Product cleaning

Please clean this product regularly with a dry soft cloth. If the dirt is difficult to remove, just dampen a soft cloth with water. Any other solvent may dissolve.

Temperature

Before turning on the unit, please make sure that the temperature in the car is between +60°C and -20°C.

Maintenance

If you encounter a problem do not repair it yourself, please return this product to an authorized Onkyo dealer or the nearest Onkyo service center for repair.

System matching

When using ONKYO DSP to distribute signals to speakers by active frequency division, please ensure that the treble frequency division point is above 1500Hz, so as not to damage the tweeter.

Installation location

This machine cannot be installed in any of the following places:

- Near direct sunlight and heat sources
- Places with high humidity and near water sources
- Dusty places
- places with severe vibration

BEFORE USING R-MS10

Thank you very much for purchasing an Onkyo audio processor. Please read this manual carefully before use. Follow the instructions and instructions of this user manual to operate, and you will get the best sound effects and listening enjoyment through the newly purchased audio processor. Please keep this manual in a safe place for future reference.

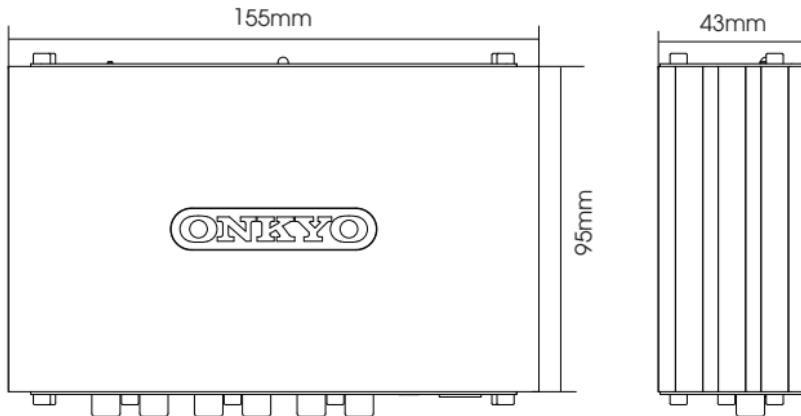
- In order to prevent electrical short-circuits, do not place the device in rain or damp places.
- Be careful not to splash water or other liquids into the device. If water splashes into the device, the device may be damaged.
- If water or other liquids enter the equipment, the power supply should be cut off immediately, and professional maintenance personnel should check and repair it to avoid accidents.
- If the equipment fails, please do not open the cover, please ask a professional to open and repair it.
- Before connecting this device, be sure to turn off your power. If you connect with the power on, the system may be damaged.
- Please place the device on a firm level surface. If it is placed on an inclined surface or placed unsteadily, not only will there be a danger of the device falling, but also its effect will be reduced.

TECHNICAL SHEET

Input Signal Type	4CH high-level, built-in Bluetooth, USB music playback
Output Type	6CH low-level, 4x50W max. power output
Output Gain	Gain Range: Mute, -60dB~6dB
Output Signal EQ	15 band EQ for every channel. <ul style="list-style-type: none">• Frequency Range: 20Hz~20KHz, Resolution 1Hz• Q value(Slope): 0.3~50• Gain: -12.0dB ~ +12.0dB, 0.1dB Resolution
Output Signal Crossover	Each channel is equipped with multi-order high and low pass independent filters. <ul style="list-style-type: none">• Filter type: Butterworth, Linkwitz, Bessel• Filter Crossover Point: 20Hz~20kHz, Resolution 1Hz• Filter slope setting: Off, 6dB/Oct to 48dB/Oct
Output Phase and Time Alignment	Adjust phase and time alignment for every output channel: In Phase 0° or Out Phase 180°; Time Alignment: 0.000 to 10.000 ms, 0 to 340 cm, 0" to 133.86".
Presets	The machine can save 6 preset music scenes.

SPECIFICATIONS

S/N (RCA Output):	≥98dB
Total Harmonic Distortion:	<1%
Frequency Response:	20Hz~20KHz
Input Impedance:	High level Input: 240Ω
RMS Power:	4x25W
MAX Power:	4x50W
Signal Input (MAX.):	High Level: 26Vpp
Signal Output (MAX.):	RCA Output: 2.2Vpp
Working Temperature:	-20℃~70℃
Power:	DC 9V~16V
REM Input:	High level signal input:FL+/FL- OR ACC Control cable
REM Output:	+12V Startup Voltage output
Standby Power:	≤0.1W
Net Weight:	Approx. 0.6Kg
Unit Dimension:	155(L) ×95(W) ×43(H) mm



AUDIO FORMATS SUPPORTED BY USB PLAYBACK

Format	Bit rate	Sampling Rate	Remark
MP3	8kbps-448kbps	8KHz-48KHZ	
WMA	5kbps-384kbps	8KHz-48KHZ	not support WMA Lossless, WMA PRO
FLAC	L0-L8(1000kbps-1200kbps)	8KHz-48KHZ	
WAV	32kbps-384kbps	8KHz-48KHZ	

FEATURE

FEATURE :

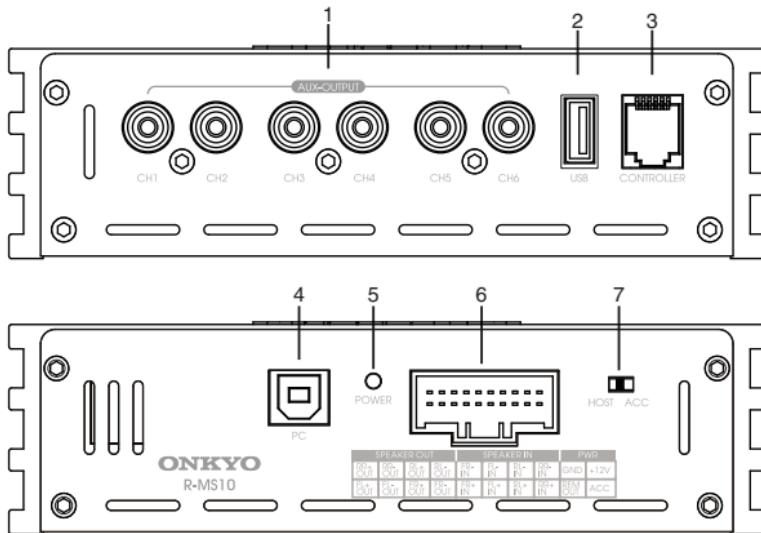
Support USB Playback

Built-in 5.0 BT

QUICK CONTROL/INPUT/OUTPUT

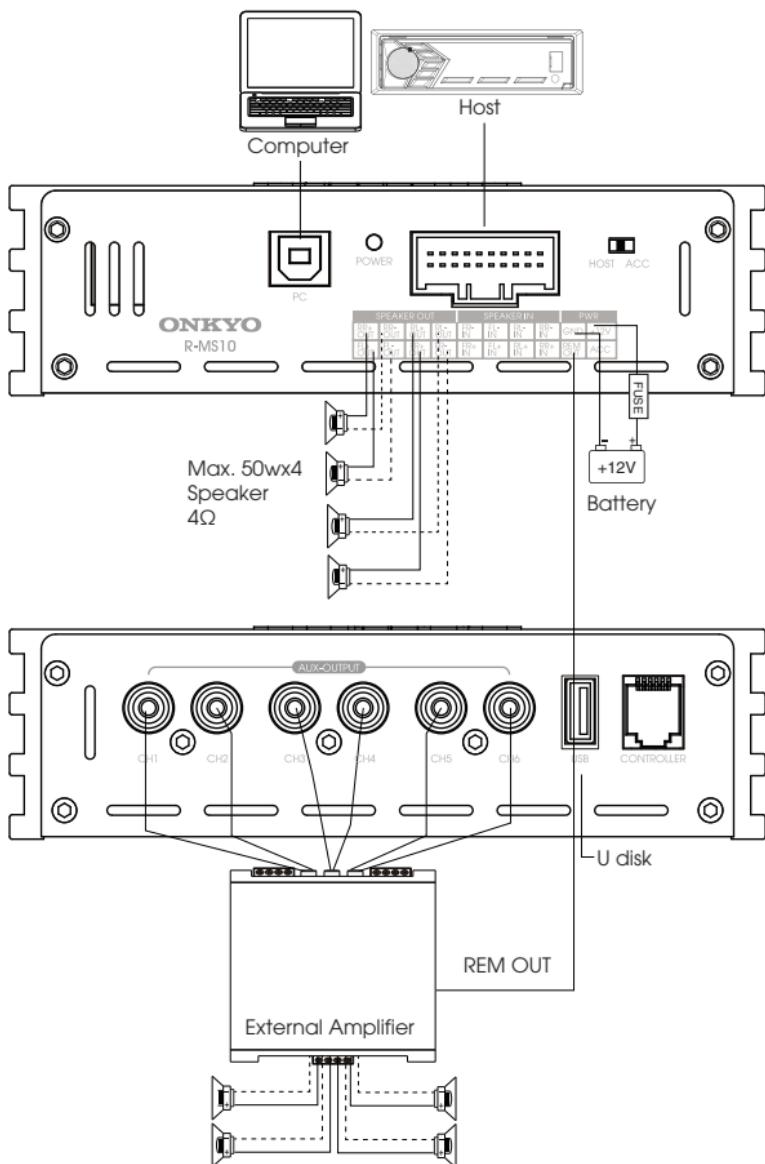
QUICK CONTROL :	INPUT :	OUTPUT :
Mobile APP	4 CH High-Level	4 CH High-Level
PC Control	USB	6 CH Low-Level
LCD Control Panel	BT	

PANEL CONTROLS AND FEATURES



1. **RCA output interface:** 6 channel RCA output.
2. **U disk interface:** Connect compatible USB or U-disk to playback music files.
3. **Controller port:** Data call and total volume can be adjusted through the wire controller.
4. **PC port:** link to computer debugging software No need to download driver installation, the sound software linked to the computer will be installed automatically.
5. **Power indicator light.**
6. • **PWR:** power
 - **Speaker in:** 4-channel high level input.
 - **Speaker Out:** 4-channel speaker output.
7. **MACHINE START MODE SWITCH:** When the switch is turned to the "ACC" terminal, the machine is started by ACC and when it is turned to the "HOST" terminal, the machine is started by the high level input signal.

CONNECTION



PC SOFTWARE 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 tablets.



1.TUNING SOFTWARE DOWNLOAD METHOD

Method 1. Web page address: <http://onkyocaraudio.com/Download> Onkyo R-MS series

Method 2. Scan the QR code on the left to get the download address of the tuning software Onkyo R-MS series



A. Main menu edit section



Main features: File, Option, Default output, Clear output, Link, Home, Mixing, Delay, and input source selection operations.

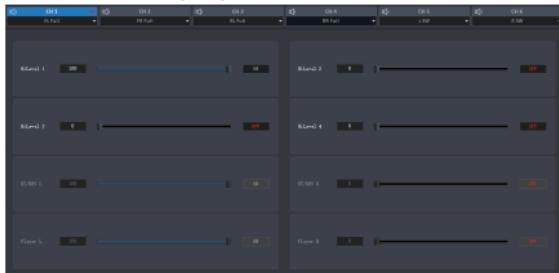
* Click on the "File" pop-up window and select to load machine preset scenarios or save as preset scenarios or load the scene file on your computer or save it as a scene file on your computer or loading machine scene and save machine scene.

* Click "Options" to choose from factory settings restoration, firmware upgrade, language, administrator login, password change, and about.



PC SOFTWARE INTRODUCTION

* Click "Mixer" for mixing interface, the interface may enter the corresponding mixing input source by switching, high level interface is as follows.



* Click the "Connected" button to connect to the host with a PC.

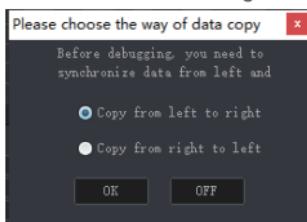


* Click on the Main source pop-up list to select the input source. BT/DEV, Hi Level, Player.

* Click on the Mix source pop-up list to select the mix source. BT/DEV, Hi Level, Player.



* Click the "Link" to enter the output channel joint debugging option, which can synchronize the data of the left and right channels.

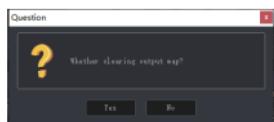
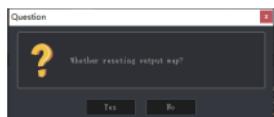


PC SOFTWARE INTRODUCTION

*Click the "Default output", The output configuration will be reset.

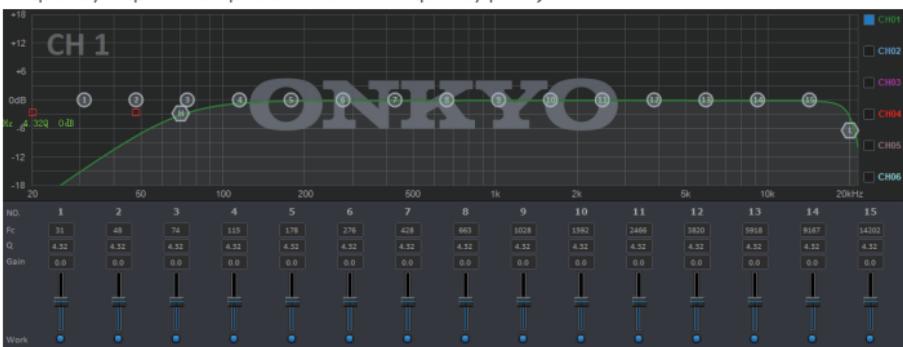
*Click the "Clear output" The output configuration will be cleared.

*Slide left and right to adjust the master volume.



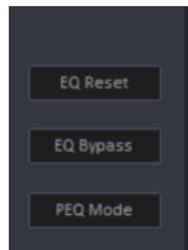
B. Channel equalizer editing area

Main function configuration: Equilibrium design of current output channel, 15-band equalization adjustable: frequency, Q value (response bandwidth) and gain (increasing or decreasing the frequency response amplitude near the frequency point).



Among:

* "Reset equalization" button: is used to restore the parameters of the 15-band equalizer to the original pass-through mode (the frequency of the equalizer, the Q value and the gain are restored to the initial value).



PC SOFTWARE INTRODUCTION

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

* "GEQ" button: click to select graphic equalization or parametric equalization.

* "Delay" button: Select the delay unit by clicking the left or right arrow, available in milliseconds, centimeters, and inches.



C. Channel divider editing area

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

Adjustable: Filter Type, Frequency point and Q Value



D. Output channel adjustment area

Output channel adjustment area, positive and negative phase of each channel, volume adjustment, mute, joint adjustment, etc.



* Sound adjustment: slide the scroll up and down to adjust the sound level of the channel, or input the value or scroll the mouse wheel in the sound input box to adjust the sound size. Click the horn button to switch between 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.

* Reset output configuration: Customizable for channel type.

* Output left and right joint adjustment: The joint of the left and right channel data of the output channel can be copied from left to right, or from right to left.

E. Main volume adjust zone



Adjustment Range: ON/OFF, -60dB~6dB.

Click the speaker button to mute the main volume.

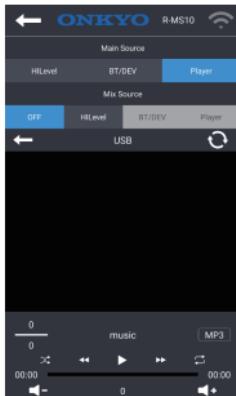
APP SOFTWARE INTRODUCTION

How to download the APP:

1. Apple mobile phone users need to search for the name "Onkyo R-MS" in the Apple market.
2. Android mobile phone users
Method 1: Log in to the web page <http://onkyocaraudio.com/Download> and download Onkyo R-MS
Method 2: Search the name "Onkyo R-MS" on Google Play and download



Home Page



Player



Delay



Output



Mixer



EQ

HAZARDOUS SUBSTANCES

THE NAME AND CONTENT OF HARMFUL SUBSTANCES OR ELEMENTS IN THE PRODUCT

Part Name	Hazardous Substances or Elements					
	Lead (Pb)	HG (Hg)	Cadmium (Cd)	Hexavalent chromium (Cr(VI))	PBBS (PBB)	Polybrominated diphenyl ethers (PBDE)
circuit board assembly	×	0	0	0	0	0
Housing components	0	0	0	0	0	0
Display components	×	0	0	0	0	0
Accessories	×	0	0	0	0	0

This form is prepared according to the provisions of SJ/T11364.

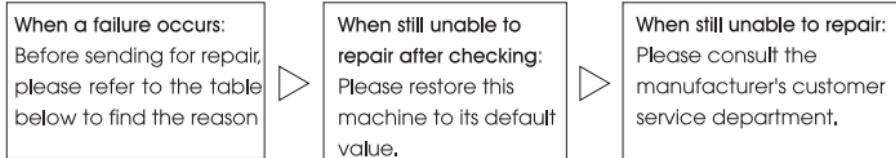
0:Indicates That The Content Of Hazardous Substances In All Homogeneous Materials Of This Part Should Be Below The Limit Requirements Specified In GB/T26572.

×:Indicates that the content of the hazardous substance in at least one homogeneous material of the part exceeds the limit requirement specified in GB/T26572.

The parts marked with "x" have exceeded the content because there is no mature alternative technology in the industry.

TROUBLESHOOTING

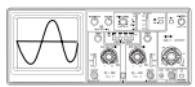
Before powering on, you should carefully check whether the connection line is normal, and you must ensure that all interfaces are properly connected. Common fault judgment and treatment methods.



TROUBLESHOOTING METHOD:

Phenomenon	Check The Reason
No power	① Is the power connection properly connected? ② Is the connection method correct?
No sound	① Has the mute operation been activated? ② Is the signal input channel selected correctly?
USB connection is not available	① Is the USB cable inserted in place? ② Is there any discovery in the ergonomic input device of the computer device manager named "HID-compliant device" equipment.

可能需要的工具（視車輛而定）

面板拆卸工具	插座	電鑽	梅花螺絲刀
			
十字螺絲刀	套筒扳手	扳手	剪線鉗
			
壓線鉗	保險鉗	頻譜分析器	示波器
			

配件清單

USB 2.0線×1	主机×1	魔术贴×2
		
說明書×1		
		

注意事項

	表示禁止的動作（不得進行）。
	表示禁止拆卸。
	表示具有強制性的操作（必須執行）。
	表示應引起您高度注意。

警告

出現問題時,請立即停止使用



否則可能會導致人身傷害或本產品損壞。請將本產品送回到授權的Onkyo經銷商或附近的Onkyo服務中心修理。

本產品只適用於12V負極接地的汽車



否則可能會引起火災等事故。

請專業人員進行配線和安裝



本產品的配線和安裝需要專業技術和經驗。为了安全起見,請聯繫您所購買產品的經銷商進行安裝。

請勿拆卸或改裝



否則可能會導致意外事故、火災或觸電。

螺栓或螺絲等小物體應放在兒童



不易觸及的地方

吞下小物體可能會導致嚴重傷害。一旦誤吞, 請立即就醫。

請勿使用會使您在駕車時分心的



任何功能

任何影響注意力的機器功能的操作都要等完全停住汽車之後才做。要使用這些功能時, 一定先把車輛停放在安全地帶。否則, 將可能導致意外事故。

駕駛中必須將音量保持在還能聽到車外雜訊的水準



聽不清緊急車輛警報聲和道路警告信號（火車交叉口等）是非常危險的, 並可能會導致事故發生。另外, 音量過大還可能會導致聽力損傷。

注意

產品清潔



請使用幹的軟布定期清潔本產品。若汙物較難清除, 請僅用水將軟布浸濕。其它任何溶劑都可能溶解。

溫度



開啟本機之前, 請確保汽車中溫度在+60°C和-20°C之間。

維修



如果您遇到問題請勿自行修理, 請將本產品送回到Onkyo授權經銷商或附近的Onkyo服務中心修理。

系統匹配



當使用ONKYO DSP採用主動分頻方式為揚聲器分配信號時, 請保證高音的分頻點在1500Hz以上, 以免損壞高音揚聲器。

安裝位置



本機不可安裝於下列任何場所:

- 陽光直射和熱源附近
- 濕度很高的地方和水源附近
- 多塵場所
- 劇烈振動的場所

使用本系統之前

非常感謝您購買Onkyo 音頻處理器。在使用之前，請詳細閱讀本使用手冊。遵照本使用手冊的指示和說明進行操作，將使您通過新購置的音頻處理器，得到最佳的音響效果和聽覺享受。請妥善保管本使用手冊，以備將來參考。

- 為了防止電氣短路，請勿將設備置於有雨或潮濕的地方。
- 請注意不要讓水或其他液體濺入本設備。如果有水濺入本設備，本設備有可能受到損壞。
- 如遇水和其他液體進入設備內，應立即切斷電源，並請專業維修人員檢查維修，以免發生意外。
- 如設備發生故障，請勿打開機蓋，請找專業人員打開和維修。
- 在連接本設備之前，請務必先關閉您的電源。若在電源打開的狀況下進行連接，則可能會損壞本系統。
- 請將本設備放置在牢固的水準表面上。若將其放置在斜面上或放置不穩，則不僅會有設備跌落的危險，還會降低其效果。

功能參數

輸入信號: 4通道高電平、內置藍牙、U盤音樂播放

輸出信號: 6路低電平、4x50W最大功率輸出

輸出信號增益: 增益範圍: 靜音, -60dB到6dB

輸出信號均衡器: 15段均衡器引擎:

- 頻率範圍: 20Hz ~ 20KHz, 解析度1Hz
- Q值(斜率或坡度): 0.3 ~ 50
- 增益: -12.0dB ~ +12.0dB, 解析度0.1dB

輸出信號分頻器: 每路通道配有多階高低通獨立濾波器。

- 專業濾波類型: 巴特沃斯(Butterworth)、寧克(Linkwitz)、貝塞爾(Bessel)
- 濾波分頻點: 20Hz-20KHz 解析度: 1Hz
- 濾波斜率(坡度)設置: 關閉6dB/Oct 至48dB/Oct

輸出相位和延時: 每路通道可進行相位和延時調整，參數範圍:

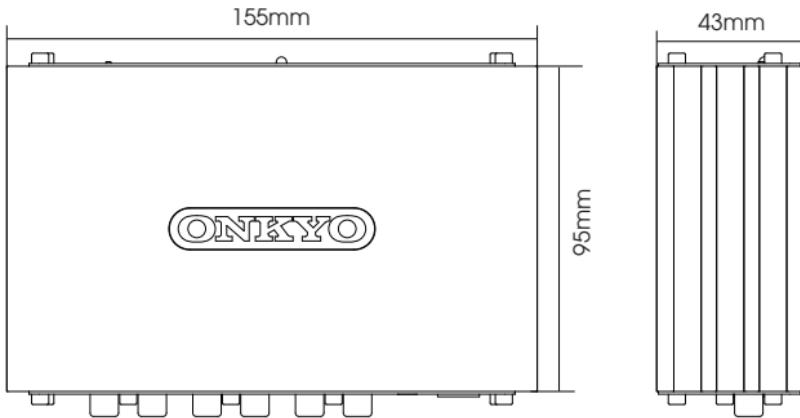
- 相位: 同相 0°或反相180°
- 延時: 0.000至10.000毫秒、0至340釐米、0至133.86英寸

機器可保存6個預置音樂場景。

場景操作:

規格

信噪比 (RCA 輸出):	$\geq 98\text{dB}$
總諧波失真:	<1%
頻率回應:	20Hz~20KHz
輸入阻抗:	高電平: 240Ω
額定功率:	$4 \times 25\text{W}$
峰值功率:	$4 \times 50\text{W}$
信號輸入 (最大):	高電平: 26Vpp
信號輸出 (最大):	RCA: 2.2Vpp
使用環境溫度:	-20°C~70°C
電源:	DC 9V~16V
REM 輸入:	高電平啟動 (HI) 、 ACC 啟動可選
REM 輸出:	+12V 啟動電壓輸出
待機功耗:	$\leq 0.1\text{W}$
產品淨重:	約0.6Kg
產品尺寸:	155 (長) \times 95 (寬) \times 43 (高) mm



USB播放支持的音频格式

格式	比特率	采样率	备注
MP3	8kbps-448kbps	8KHz-48KHz	
WMA	5kbps-384kbps	8KHz-48KHz	不支持WMA Lossless,WMA PRO
FLAC	L0-L8(1000kbps-1200kbps)	8KHz-48KHz	
WAV	32kbps-384kbps	8KHz-48KHz	

特色功能

特色功能：

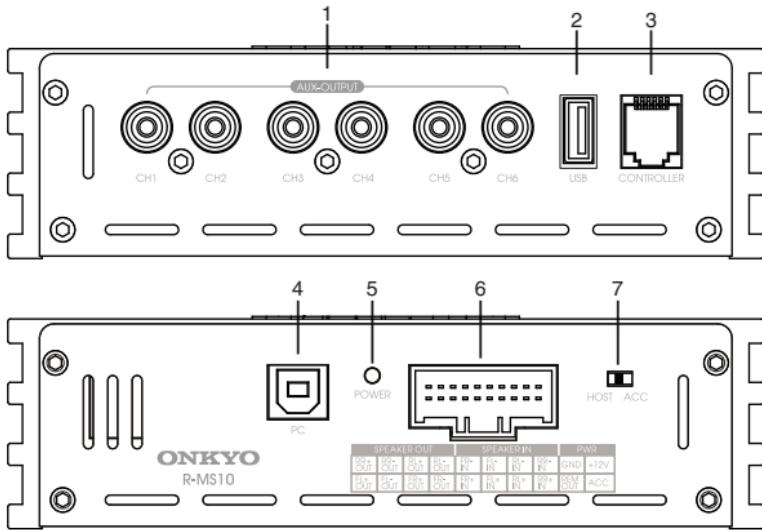
支持USB播放

内置5.0蓝牙

便捷控制 / 輸入 / 輸出

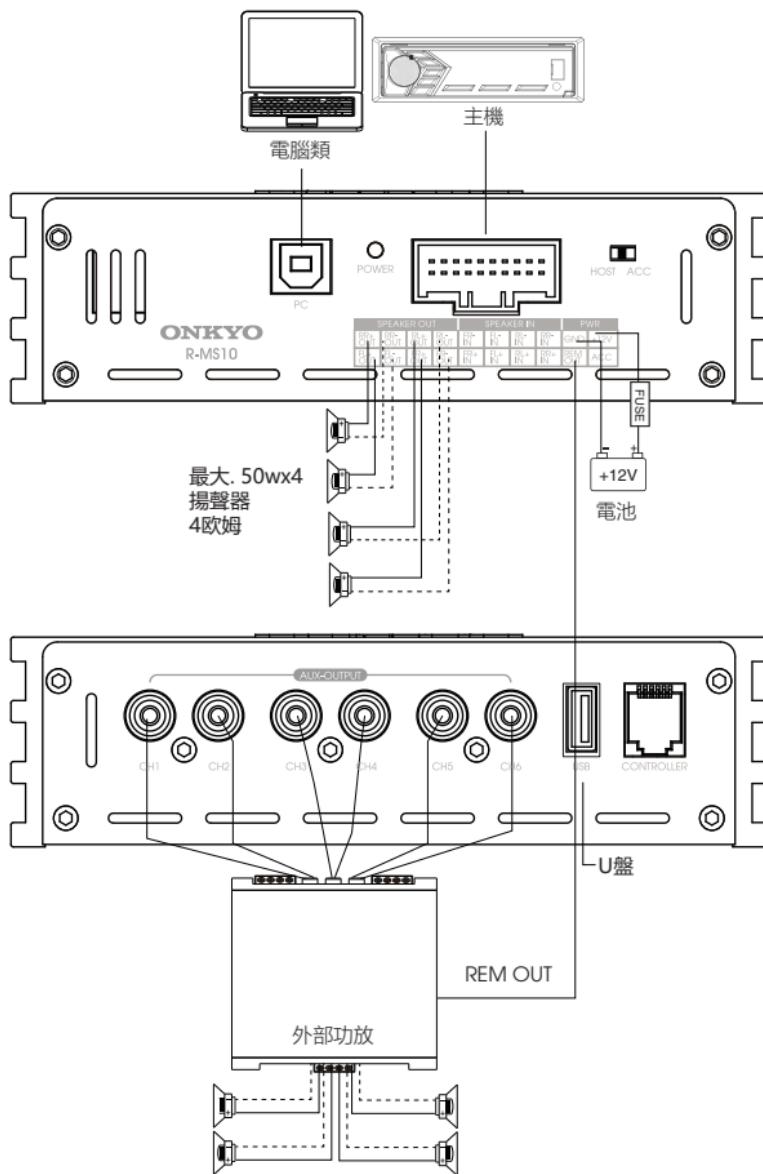
便捷控制：	輸入：	輸出：
手機APP	4路高電平	4路高電平
PC控制	USB	6路低電平
LCD控制面板	BT	

設備端口簡介



1. RCA輸出接口：6聲道RCA輸出。
2. U盤接口：連接兼容USB或U盤播放音樂文件。
3. 控製器接口：通過線控器可調節數據通話和總音量。
4. PC接口：連接電腦調試軟件無需下載驅動安裝，連接電腦的音響軟件會自動安裝。
5. 電源指示燈。
6. PWR: 電源
 - Speaker in: 4聲道高電平輸入。
 - Speaker Out: 4聲道喇叭輸出。
7. 機器啟動方式開關：當開關撥至「ACC」端時，機器由ACC啟動，撥至「HOST」端時，機器由高電平輸入信號啟動。

連接



PC 控制軟體介紹

電腦配置要求：顯示器解析度大於1280×768，否則不能完全顯示介面。只適應於Windows作業系統的手提電腦、臺式電腦和平板電腦。



一. PC調音軟體下載方式

方法1: 登陸網址<http://onkyocaraudio.cn/app>,

找到"Onkyo R-MS,"並下載

方法2: 掃左邊二維碼獲取調音軟體下載位址, 下載"Onkyo R-MS".



A.主功能表編輯部分



主要特點：文件，選項，默認輸出，清除輸出，連接，主頁，混合，延遲，和輸入源選擇操作。

* 點擊“文件”彈出視窗，選擇載入機器預設場景或另存為預設場景或將場景檔載入到您的電腦上或將其保存為電腦上的場景檔或載入機器場景並保存機器場景。

* 點擊“選項”彈出視窗選擇方向盤控制學習，出廠重置，更新固件，語言，管理員登錄，密碼修改和關於。



PC 控制軟體介紹

* 點擊“混音”進入混合界面，該介面可通過切換進入相應的混合輸入源，高級介面如下



* 按兩下“已聯機”按鈕以連接到具有PC的主機。

未連接

⇒ 已聯機

* 按下主音源彈出清單以選擇輸入源。藍牙/設備、高電平、播放機。

* 按一下混音源彈出清單以選擇混音源。藍牙/設備、高電平、播放機。



* 點擊“連接”進入輸出通道聯合調試選項，可以同步左右通道的數據。



PC 控制軟體介紹

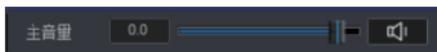
*點擊“預設輸出”，輸出配置將被重置



*点击“清除输出”输出配置将被清除。



*左右滑動以調整母版音量。



B.通道均衡器編輯區

主要功能配置:电流输出通道均衡设计，15段均衡可调:频率、Q值(响应带宽)和增益(增加或减少频率点附近的频率应幅度)



其中：

* “復位均衡器” 按鈕：用於將15頻段均衡器的參數恢復到原來的直通模式（均衡器的頻率、Q值和增益恢復到初始值）。



PC控制軟體介紹

- * “均衡器”按鈕：在當前設計的均衡器狀態參數和直通模式之間切換（所有均衡點的增益恢復到0dB，頻率和值不變）
- * “參量均衡器”按鈕：點擊選擇圖形均衡或參數均衡。
- * “延遲”按鈕：通過按兩下向左或向右箭頭選擇延遲單位，可用毫秒、釐米和英寸為單位。



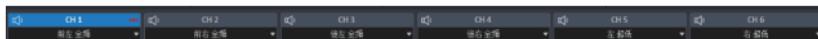
C.頻道分割編輯區

主要功能設置：通道高低通濾波器設置。可調：濾波器類型、頻點和Q值



D.輸出通道調整區

輸出通道調整區域，各通道正負相位，音量調整，靜音，聯合調整等。



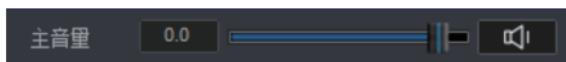
*聲音調節：通過上下滑動滾動條來調節通道的音量，或在聲音輸入框中輸入數值或滾動滑鼠滾輪來調節聲音大小。按一下喇叭按鈕以在靜音之間切換。

- * 正相位調整：點擊 “0°” 或 “180°” 可在正相位和反相位之間切換。
- * 延時：在延時輸入框中滾動滑鼠滾輪設置延時值，或輸入值設置延時值。
- * 重置輸出配置：可根據通道類型自定義。
- * 輸出左右關節調整：輸出通道的左右通道數據的關節可以從左到右複製，也可以從右到左複製。



E.主音量調節區

調節範圍：開/關，-60分貝~6分貝點按揚聲器按鈕以靜音主音量。



手機軟體使用介紹

二. 手機APP調音軟體下載方式

一. 蘋果手機用戶：需在蘋果市場搜尋名稱"Onkyo R-MS,"

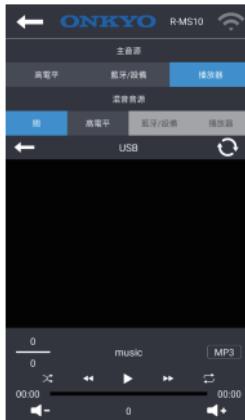
二. 安卓手機用戶

方法一：登入網站<http://onkyocaraudio.cn/app>下載， "Onkyo R-MS,"

方法二：在Google Play搜尋名稱"Onkyo R-MS,"並下載



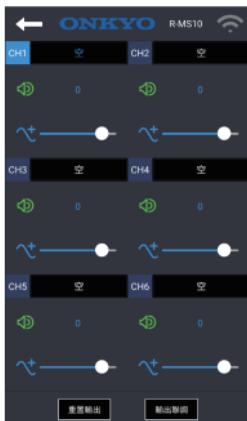
主頁



播放機



延時



通道



混音



EQ

有害物質成分

產品中有害物質或元素的名稱及含量

部件名稱	有害物质或元素					
	鉛 (Pb)	汞 (Hg)	鎘 (Cd)	六價鉻 (Cr(VI))	多溴聯苯 (PBB)	多溴二苯醚 (PBDE)
電路板組件	×	0	0	0	0	0
殼體組件	0	0	0	0	0	0
顯示組件	×	0	0	0	0	0
配件	×	0	0	0	0	0

本表格依據SJ/T11364的規定編制。

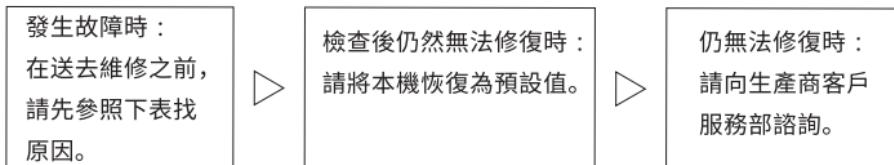
0 : 表示應該有害物质在该部件所有均质材料中的含量均在GB/T26572規定的限量要求以下。

× : 表示该有害物质至少在该部件某一均质材料中的含量超出GB/T26572規定的限量要求。

打“×”的部件, 其含量超出是因為目前业界还没有成熟的可替代的技术。

常見故障解決

通電前, 應仔細檢查連接線是否正常, 必須保證所有介面為正常連接。常見故障判斷及處理方法:



故障排除方法:

故障現象	檢查原因
不通電	① 電源連接是否正確連接? ② 動方式是否正確連接?
無聲音	① 是否啟動了靜音操作? ② 信號輸入通道選擇是否正確?
USB連線不上	① USB 連接線有無插到位? ② 電腦裝置管理員的人體學輸入裝置內有無發現名為“HID-compliant device”的設備。

ONKYO®