Nakamichi

NGO-A4250

User Manual

4 CHANNEL POWER AMPLIFIER

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INTRODUCTION

Thank you for your purchase of our Nakamichi product and we warmly welcome you to the Nakamichi family! Do keep your original invoice and purchase receipt in a safe place in case of future service and warranty claims. You may also contact your appointed Nakamichi service agent for any future technical support requirements.

ACCESSORY LIST

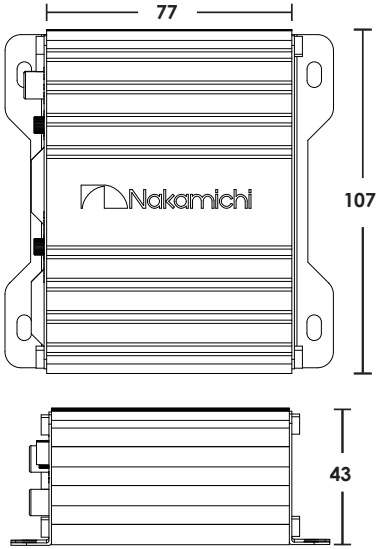
1. User Manual	1pc
2. Amplifier	1pc
3. Mounting Screw (Φ4x16mm)	4pcs
4. 16P Cable	1pc

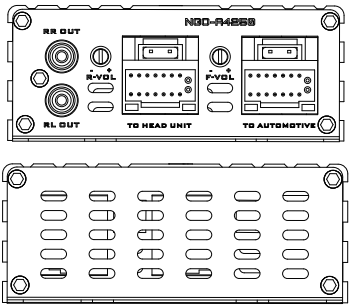
SPECIFIATIONS

Max power	50Wx4
T.H.D	<0.1%
Frequency Response	20Hz-20KHz
Signal To Noise Ratio	≥88dB
Sensitivity	0.2~6
Unit Dimensions(LxHxW)	77x107x43mm
Net Weight	Approx. 0.8kg

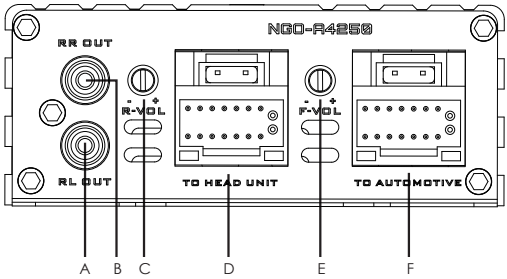
All specifications subject to change without notice.

DIMENSIONS (UNIT:MM)





PANEL CONTROLS AND FEATURES



A/B.Left/Right RCA output

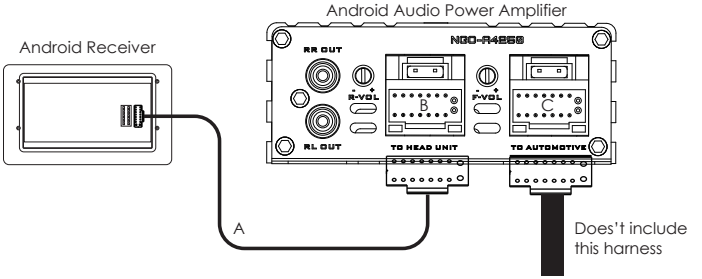
C.Rear 2channel volume adjustment

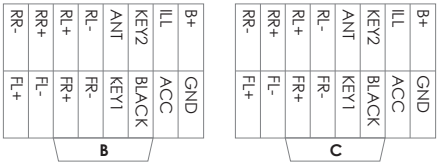
D.Front 2channel volume adjustment

E.Connect to Android Navigation Host

F.Car connection with original car harness

POWER CONNECTION LEADS





A.POWER SUPPLY		
Name	Color	Full name
BATT+	Yellow	+12V Power Cord
GND	Black	Ground Wire
ILL	Orange	Small Light Detection Line
ACC	Red	Ignition Switch Wire
KEY2	Brown	Steering Wheel Control Line 2
BLACK	Pink	Reversing Detection Line
ANT	Blue	Automatic Antenna Power Supply
KEY1	Orange/Black	Steering Wheel Control Line 1
RL-	Green/black	Rear Left Speaker -
FR-	Gray/black	Front Right Speaker -
RL+	Green	Rear Left Speaker +
FR+	Grey	Front Right Speaker +
RR+	Purple	Rear Right Speaker +
FL-	White/black	Front Left Speaker -
RR-	Purple/black	Rear Right Speaker -
FL+	White	Front Left Speaker +

INTERFERENCE

All cables can create interference. The power cable and cinch / RCA audio cables are very prone to interference from other sources, while remote cables are less prone. Interference is often caused by the generator, ignition, or any other electronic parts or systems. Most of these problems can be eliminated by correct and careful wiring during setup. Here are some guidelines to follow.

• Use only a shielded audio cable for the wiring between the low level input of the amplifier and the RCA or DIN output of the radio.

• Lay the signal, speaker and power cables separately with enough distance from one another and also from each other car cable. Ir not possible, you can lay the circuit and ground cable together with the serial cables. Audio and speaker cable should be as far away from these as possible. The REM cable to the automatic antenna output of the radio can be laid together with the signal cables.

• Avoid ground loops by laying the ground wiring of all components towards a central point in a star layout. You can locate fne best point by measuring the voltage directly at the battery, and comparing the voltage value with the chosen ground point and the positive terminal of the amplifier. If the measured voltage is only slightly different, you've found the correct central location. Other wise please look for another point. You should measure with the ignition point
for earth switched on.

• If there are pickups from external electrical sources into the speaker cables, divide the core leads and twist them together.

• If there are noises from the car electrics, add an interference suppression choke into the power wiring.

• If there are humming noises, use thicker ground cables or add further ground cables to the chassis.

• To reduce contact resistance and bad and loose contacts, please solder the cable ends or use multi core cable ends, spade terminals or others. Gold Plated spade terminal are free of corrosion and have the lowest contact resistance.

• Should all these measures not bring about any success, the use of a ground loop isolator may solve the problem.

TROUBLESHOOTING

If you experience operation or performance problems with this product, compare your installation with the electrical wiring diagram on the previous pages.If problems persist, read the following troubleshooting tips which may help eliminate the problems.

SYMPTOM	POSSIBLE CAUSE	ACTION TO TAKE
NO OUTPUT	•Low or no remote turn-on input	•Check remote turn-on voltage output at amplifier and correct as needed
	•Fuse blown	•Check power wire integrity and reversed polarity, repair as needed and replace fuse
	•Power wires not connected	•Check power wire and ground connections and repair of replace as needed
	•Audio input not connected or no output from source	•Check input connections and signal integrity, repair or repalce as needed
	•Speaker wires not connected	•Check speaker wires and repair or replace as needed
AUDIO CYCLES ON AND OFF	•Speaker are blown	•Check system with known working speaker and repair or replace speaker as needed
	•Thermal protection engages when amplifier heat sink temperature exceeds 90℃	•Make sure there is proper ventilation for amplifier and improve ventilation as needed
	•Loose or poor audio input	•Check input connections and repair or replace as needed
DISTORTED OUTPUT	•Amplifier lecel sensitivity set too high; exceeding maximum output capability of amplifier	•Reset gain referring to the turning section of the manual for detailed instructions
	•Impedance load to amplifier too low	•Check speaker impedance load, if below 2Ω stereo or 4Ω mono rewire speakers to achieve a higher impedance
	•Shorted speaker wires	•Check speaker wire connecrions and repair or replace as needed
	•Speaker not connected to amplifier properly	•Check speaker wiring and repair of replace as needed refer to the installation section of this manual for detailed instructions
	•Internal crossover not set properly for speaker	•Reset crossovers referring to the multi-cross crossover configuration section of this manual
DISTORTED OUTPUT (CONT'D)	•Speaker are blown	•Check system with known working speaker and repair or replace as needed
POOR BASS RESPONSE	•Speaker wired wrong polarity causing cancellation at low frequencies	•Check speaker polarity and repair as needed Reset crossovers referring to the multi-cross
	•Crossover set incorrectly	•Crossover configuration secrion of this manual for detailed instructions
DISTORTED OUTPUT (CONT'D)	•Impedance load to amplifier too low	•Check speaker impedance load, if below 2Ω stereo or 4Ω mono rewire speaker to achieve a higher impedance
	•Short in power wire or incorrect power connections	•Check power and ground connections and repair as needed
	•Fuse used is smaller than recommended	•Replace with proper fuse size
	•Too much current being drawn	•Check speaker impedance load, if below 2Ω stereo or 4Ω mono rewire speaker to achieve a higher impedance
	•Short in power wire of incorrect	•Check power and ground connections and repair as needed

介紹

感謝你的購買，歡迎來到Nakamichi！為了享受我們提供的更好的服務，請妥善保管原始發票。你最好將副本發回Nakamichi的指定服務代理商，以便獲得更多技術支持。

配件清单

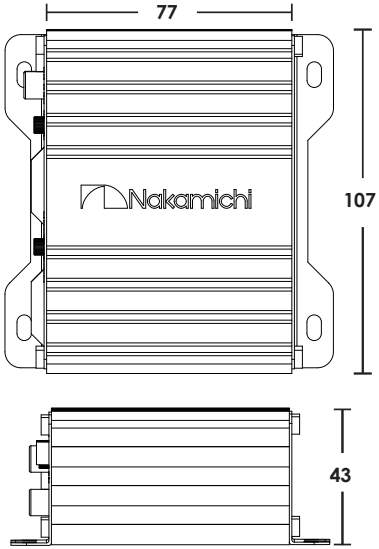
1. 用戶手冊	1本
2. 功率放大器	1臺
3. 安装螺絲(Φ4x16mm)	4個
4 16P 線材	1條

產品規格

最大功率	50Wx4
總諧波失真	<0.1%
頻率響應	20Hz-20KHZ
信噪比	⩾88dB
靈敏度	0.2~6
機器尺寸（長x寬x高）	77x107x43MM
機器淨重	約0.8kg

所有規格如有變更，恕不另行通知

尺寸：（單位MM）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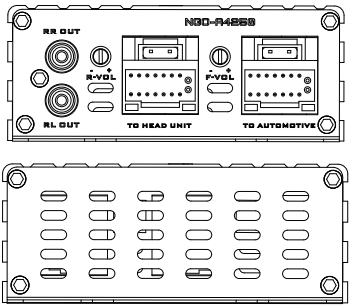
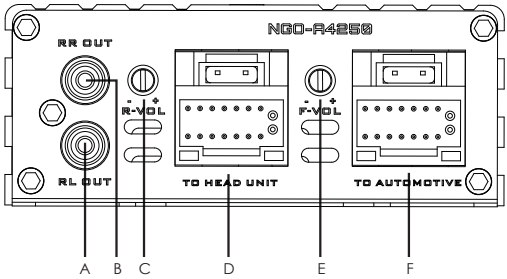

NQD-A4255
RR OUT
R-VOL
F-VOL
RL OUT
TO HEAD UNIT
TO AUTOMOTIVE

面板控件和功能



A/B.左/右RCA輸出

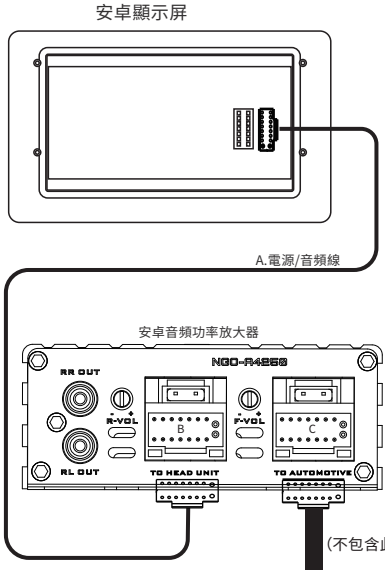
C.後置2聲道音量調節

D.前置2聲道音量調節

E.連接安卓導航主機

F.與原車線束車載連接

電源線連接



A.電源線明細		
序號	顏色	名稱
1	黃色	+12V電源線
2	黑色	接地線
3	橙色	小燈檢測線
4	紅色	點火開關線
5	棕色	方向盤控制線2
6	粉色	倒車檢測線
7	藍色	自動天線電源
8	橙/黑	方向盤控制線1
9	綠/黑	後左揚聲器-
10	灰/黑	前右揚聲器-
11	綠色	後左揚聲器+
12	灰色	前右揚聲器+
13	紫色	後右揚聲器+
14	白/黑	前左揚聲器-
15	紫/黑	後右揚聲器-
16	白色	前左揚聲器+

後右揚聲器-	後右揚聲器+	後左揚聲器+	後左揚聲器-	自動天線電源	方向盤控制線2	小燈檢測	+12V電源輸入
前左揚聲器+	前左揚聲器-	前右揚聲器+	前右揚聲器-	方向盤控制線1	倒車檢測線	點火開關線	接地線

B.音頻輸入

後右揚聲器-	後右揚聲器+	後左揚聲器+	後左揚聲器-	自動天線電源	方向盤控制線2	小燈檢測	+12V電源輸入
前左揚聲器+	前左揚聲器-	前右揚聲器+	前右揚聲器-	方向盤控制線1	倒車檢測線	點火開關線	接地線

C.音頻輸出

幹擾問題

所有電纜都會產生幹擾。電源線和Cinch/RCA音頻線很容易受到其他來源的幹擾，而遠程線則不太容易受到幹擾。 幹擾通常是由發電機，點火器或任何其他電子零件或系統引起的。通過在安裝過程中正確和仔細的接線，可以消除大多數這些問題。以下是壹些要遵循的準則。

● 在放大器的低電平輸入與收音機的RCA或DIN輸出之間的布線僅可使用屏蔽音頻電纜。

● 分開鋪設信號線，揚聲器線和電源線，彼此之間以及與汽車電纜之間要保持足夠的距離。不可能的話，您可以將電路和接地電纜與串行電纜壹起放置。音頻和揚聲器電纜應盡可能遠離它們。可以將到無線電的自動天線輸出的REM電纜與信號電纜放在壹起。

● 通過將所有組件的接地線朝向星形布局的中心點來避免接地回路。您可以通過直接在電池上測量電壓並將電壓值與所選接地點和放大器的正極端子進行比較來找到最佳點。如果測得的電壓僅稍有不同，則您已找到正確的中心位置。否則請尋找另壹點。妳應該用點火點測量用於接地。

● 如果揚聲器電源線中有來自外部電源的拾音器，請分開芯線並將其絞合在壹起。

● 如果汽車電氣產生噪音，請在電源線中加入壹個幹擾抑制扼流圈。

● 如果有嗡嗡聲，請使用較粗的接地電纜或將更多的接地電纜添加到機箱。

● 為降低接觸電阻和不良接觸，請焊接電纜末端或使用多芯電纜末端，鏟形端子或其他。鍍金鏟形端子無腐蝕，接觸電阻最低。

● 如果所有這些措施都不能成功，則使用接地回路隔離器可以解決問題。

故障排除

遇見操作或性能上的問題，如果前面的介紹和說明未能幫到妳成功解決，請閱讀下面的故障排除技巧，希望能幫助妳解決問題。

故障現象	故障原因	解決方法
沒有輸出	• 遙控開啟輸入低或沒有開啟	• 檢查功放機遙控的電壓開啟輸出，並根據需要進行校正
	• 保險絲熔斷	• 檢查電源線的完整性和極性是否反轉，根據需要進行維修並更換保險絲
	• 電源線未連接	• 檢查電源線和接地連接，根據需要進行更換或維修
	• 音頻輸入未連接或音源沒有輸出	• 檢查輸入連接和信號完整性，根據需要進行維修或更換
	• 揚聲器導線未連接	• 檢查揚聲器電線並根據需要進行維修或更換
音頻循環開啟和關閉	• 揚聲器壞了	• 檢查已知工作揚聲器，並根據需要修理或更換揚聲器
	• 當功放機散熱片溫度超過90°C時，過熱保護接合	• 確保功放機有適當的通風，並根據需要改善機器通風
	• 音頻輸入松動或不良	• 檢查輸入連接並根據需要進行維修或更換
輸出不正常	• 功放機電平靈敏度設置得太高，超過功放機的最大輸出	• 有關詳細說明，請參閱本手冊的調諧部分重置增益
	• 功放機的阻抗負載太低	• 檢查揚聲器阻抗負載，如果低於2Ω立體聲或4Ω單聲道重新接線揚聲器，以實現更高的阻抗
	• 喇叭線短路	• 檢查揚聲器導線連接並根據需要進行維修或更換
	• 揚聲器未正確連接到功放機	• 根據需要檢查揚聲器接線和更換維修，請參閱本手冊的安裝部分以獲取詳細說明
	• 揚聲器內置分頻器未正確連接	• 參考本說明書線路連接部分的多種連接方式，並重新連接揚聲器
連續輸出不正常	• 揚聲器壞了	• 檢查已知工作揚聲器的系統，並根據需要進行維修或更換
	• 功放機的阻抗負載太低	• 檢查揚聲器阻抗負載，如果低於2Ω立體聲或4Ω單聲道重新接線揚聲器，以實現更高的阻抗
	• 電源線短路或電源連接不正確	• 檢查電源和接地連接並根據需要進行維修
	• 使用的保險絲小於推薦值	• 更換適當的保險絲尺寸
	• 電流太大了	• 檢查揚聲器阻抗負載，如果低於2Ω立體聲或4Ω單聲道重新接線揚聲器，以實現更高的阻抗
	• 電源線不正確鏈接導致短路	• 檢查電源和接地連接並根據需要進行維修
低音反應差	• 揚聲器接線錯誤，導致低頻消除	• 檢查揚聲器極性並根據需要進行修理
	• 交叉設置不正確	• 參考本說明書更詳細的線路連接部分，並重新連接揚聲器

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