

NBF25.5A

User Manual



9.2" ACTIVE ALUMINUM SUBWOOFER

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.

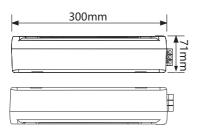
ACCESSORY LIST

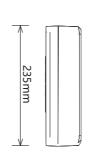
1.User Manual	1PC\$
2.Mounting Screw (Φ4x8mm)	4PCS
3.Mounting Screw (Ф4x16mm)	4PCS
4.Mounting Screw (Φ3x8mm)	2PC\$
5.Allen Wrench	1PC
6.High Level Input Cable	1PC
7.Remote Control	1SET
8.Mounting	4PCS
9.Fuse (20A)	1PC
10.Velcro	2PCS

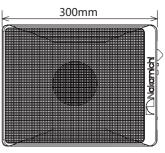
SPECIFIATIONS

N-power Output	150W
Max Power	1500W
T.H.D.	≤0.2%
Signal To Noise Ratio	≥90dB
Frequency Response	20Hz - 150Hz
Input Sensitivity, High level	0.5V
Input Sensitivity, low level	110mV
Low Pass Filter	50Hz - 150Hz
Bass Boost	0 to +12dB
Subsonic Filter	20Hz (Fixed)
Fuse Rating	20A
Subwoofer	9.2 inch, 3ohms
Dimension (L x W x H) mm	300 x 235 x 71 mm

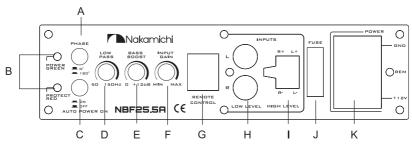
All specifications subject to change without notice.







PANEL CONTROLS AND FEATURES



A. PHASE CONTROL:

Adjust the phase from 0 to 180 degrees.

B. STATUS INDICATORS:

Green LED: the subwoofer is powered on and operational. Red LED: the subwoofer is in protection mode and not operational. This problem is caused by input overload, short circuit or high temperature.

C. AUTO POWER ON:

This function works only with high level input connection, and you do not need to make the wire connection to the remote terminal on the subwoofer. Press ON or OFF switch to activate or deactivate the function. If activated, the subwoofer will automatically power on or off whenever your head unit is turned on or off.

D. LOW PASS FILTER (LPF):

Use this control to define the frequency range you want the subwoofer to receive. The subwoofer will only receive the frequencies below the one you set to reproduce sound.

Tip: If the other speakers of your audio systems are weak on the mid frequencies, set the LPF control relatively high. if the midrange is well covered by the other speakers of your audio system, set the LPF control relatively low only to receive lower frequency signal.

E.BASS BOOST CONTROL:

Use this control to boost the intensity of low-frequency signals, with a range from 0 to +12dB, to enhance the bass effect

F.SPEAKER GAIN CONTROL:

Adjust the input level of this subwoofer in order to match the output level from your source unit (head unit). Important! Do not adjust the input level to maximum unless your input level requires it. Follow the steps below to set your input level correctly: a. On this subwoofer, turn the input gain control to minimum. b. On your source unit, turn the volume to about 3/4 full level. c. Slowly turn up the input gain control until you hear a small amount of distortion. Then turn down the gain control until the distortion is completely gone. Leave the gain control at this setting.

G. REMOTE LEVEL CONTROL PORT:

Connect to the supplied remote subwoofer level control. Use the control to adjust volume level of the subwoofer independently.

PANEL CONTROLS AND FEATURES

H.LOW-LEVEL INPUT (RCA INPUT):

Connect to the RCA outputs on your head unit. Low level input is recommended to input audio signal to the subwoofer if RCA outputs are present on your head unit or signal processor.

I.HIGH-LEVEL INPUT:

Connect to the speaker wires on your head unit. If your head unit does not have RCA outputs, use the speaker wires on the head unit for audio signal input from your head unit.

J. FUSE HOLDER:

Insert a 20A blade type fuse (ATO) to provide protection of the circuitry. Do not use a fuse with a different rating. Never replace the fuse with a wire or coin.

K.POWER TERMINALS:

GND: Connect to the closest point on the chassis of your vehicle.

REM: Connect to the remote output wire of your head unit. No need to make the remote connection if youuse high-level input connection and auto power on function is activated.

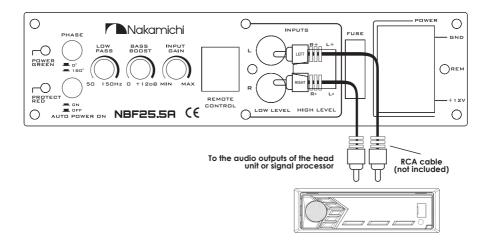
+12V: Connect to the positive terminal of the 12V vehicle battery.

LOW LEVEL INPUT WIRING

Low-level (RCA) input wiring is preferred for best audio performance. Most trunk and under-seat installations will require a 6-12 feet RCA cable. Always use a high quality cable.

NOTE: Do not connect BOTH the high level and low level inputs from your receiver to your amplifier at the same time!

Fig.1

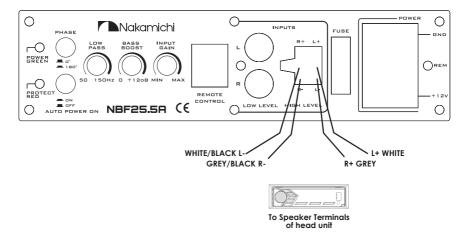


HIGH LEVEL INPUT WIRING

The high level input(s) should only be used when your receiver lacks RCA outputs. If the RCA outputs are not present, connect the speaker outputs from the receiver to the high level input connector of the amplifier. Be sure to observe polarity to avoid audio phase problems.

NOTE: Do not connect BOTH the high level and low level inputs from your receiver to your amplifier at the same time!

Fig.2



POWER CONNECTIONS

- 1. Connect the ground terminal to the closest point on the chassis of the vehicle.
- 2.Use 8 gauge (or heavier) wire to connect the ground cable.
- Connect the remote terminal to the remote output of head unit using 16 gauge (or heavier) wire.
- 4. Connect an empty fuse holder within 16" (40 cm) of the car battery, can run 8 gauge (or heavier) cable from this fuse to the amplifier location. Then connect the fuse holder to the "BATT+" (+12V) connection on the subwoofer rear panel.

REMOTE LEVEL CONTROL CONNECTION

Fig.3

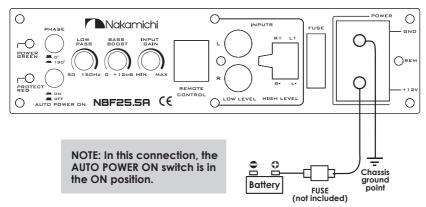


Fig.4

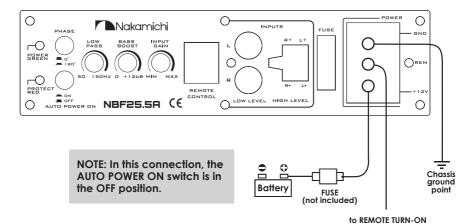
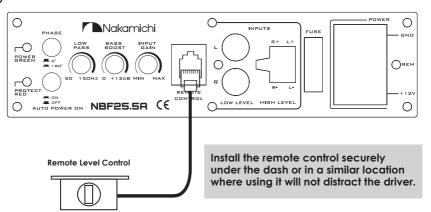


Fig.5



terminal of head unit

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.

SYMPTOMS	POSSIBLE REMEDY
Products will not power up.	Check to make sure you have a good ground connection. Check that the Remote Input (Turn-On) has at least 5VDC. Check that there is battery power on the (+) terminal. Check that there is at least 12v. Check all fuse, replace if necessary. Make sure that the Protection LED is not illuminated. If it is lit, shut off the amplifier briefly, and then repower it.
Protection LED comes on when amplifier is powered up	Turn down the volume control on the head unit to prevent overdriving. Check that there is good air circulation around the amp.
No output	Turn down the volume control on the head unit to prevent overdriving. Check that there is good air circulation around the amp. Check that all fuses are OK. Check that unit is properly grounded. Check that the Remote Input (Turn-On) has at least 5VDC. Check that the RCA audio cables are plugged into the proper inputs.
Low output	Reset the Level Control. Check the Crossover Control settings.
High hiss in the sound.	Disconnect all RCA inputs to the power sub's control panel. If the hiss disappears, then plug in the component driving the amplifier and unplug its inputs. If the hiss disappears at this point, go on until the faulty/noisy component is found. It is best to set the amplifier's input level control as low as possible. The best subjective signal-to-noise ratio is achieved in this manner. Try to set the head unit as high as possible (without distortion).
Squealing noise is present.	Check for improperly grounded RCA interconnects.
Distorted sound.	Check that the Input Level Control is set to match the signal level of the head unit.
Engine noise (static type)	This is usually caused by poor quality RCA cables, which can pick up noise. Use only the best quality cables, and route them away from power cables.
Engine noise (alternator whine)	Check that the RCA grounds are not shorted to the vehicle chassis. Check that the head unit is properly grounded.

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,以便瘦得更多技術支持。

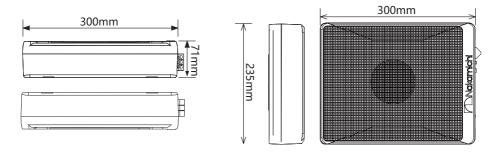
配件清單

1.說明書	1本
2.螺絲(Φ4x8mm)	4顆
3.螺絲(Φ4x16mm)	4顆
4.螺絲(Φ3x8mm)	2颗
5.六角扳手	1個
6.高電平輸入線	1條
7.線控	1套
8.安裝支架	4塊
9.保險絲(20A)	1個
10.魔術貼	2塊

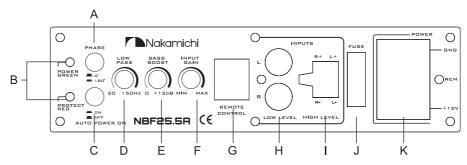
產品規格

額定功率	150W
峰值功率	1500W
總諧波失真	≤0.2%
信噪比	≥90dB
頻率響應	20Hz-150Hz
高電平輸入靈敏度	0.5V
低電平輸入靈敏度	110mV
低通濾波器	50Hz-150Hz
低音提升	0 to +12dB
高通濾波器	20Hz(Fixed)
保險絲額定值	20A
主動低音喇叭,負載	9.2 inch, 3ohms
尺寸(長x寬x高)毫米	300x235x71mm

所有規格如有變更,恕不另行通知



面板控制和特性



A.相位開關:

在不同的位置,通過轉換0度或180度相位可以得到最大的低音效果。

B.狀熊指示燈:

當亮起綠色時,低音炮已通電並處於工作狀態。當亮起紅色燈時,低音炮處於保護模式,無法工作。此問 題是由輸入過載、短路或高溫引起的。

C. 白動開機:

此功能僅適用於高電平輸入連接,您無需將電線連接到低音炮上的遠程終端。按開或關開關以啟動或停用 此功能。如果啟動,當您的頭單元打開或關閉時,低音炮將自動打開或關閉。

D. 低通濾波器:

這個撥盤用於設置超低音擴大器的低通濾波頻率,可以調整為50Hz或150Hz,以決定哪些頻率的音頻信號 被放大。

E. 低音增強:

這個撥盤用於提升低頻信號的強度,範圍從0到+12dB,以增強低音效果。

F. 輸入增益控制:

調整這個低音炮的輸入電平,以便與您的音源單元(主機單元)的輸出電平相匹配。注意!除非您的輸入電平需要,否則不要將輸入電平調整到最大。按照以下步驟正確設置您的輸入電平:

a. 在這個低音炮上,將輸入增益控制調至最小。b. 在您的音源單元上,將音量調至大約3/4的滿量程。c. 慢慢調高輸入增益控制,直到您聽到少量的失真。然後降低增益控制,直到失真完全消失。將增益控制保持在這個設置上。

G. 遙控控制:

連接到提供的帶線遠程控制器,使用該控制器可以獨立調節低音音量。

H. 低雷平輸入

連接到您的主機單元上的RCA輸出。如果您的主機單元或信號處理器上有RCA輸出,建議使用低電平輸入將 音頻信號輸入到超低音喇叭。

面板控制和特性

I. 高雷平輸入:

連接到主機單元上的揚聲器線。如果您的主機單元沒有RCA輸出,請使用主機單元上的揚聲器線從主機單元輸入音訊信號。

J. 保險絲座:

插入一個20A規格的保險絲(ATO)以保護電路。不要使用不同額定值的保險絲。切勿用電線或硬幣代替保險絲。

K. 雷源端子:

GND: 連接到您車輛底盤的最靠近點。

REM: 連接到您主機單元的遙控輸出線。如果您使用高電平輸入連接並且自動開機功能已啟動,則無

需進行遙控連接。

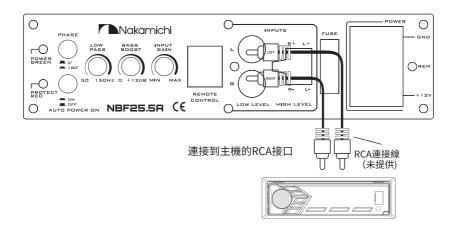
+12V: 連接到12V車輛電池的正極端子。

低電平輸入連接方式

低電平翰入接可以得到最好的低音效果,RCA運接線(附件不提供)。為了减少失真和干擾,建議使用高 品質的RCA連接線。

注意: 高電平和低電平不要同時輸入!

圖 1

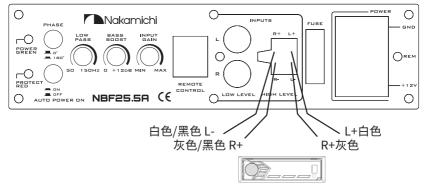


高電平輸入連接方式

如果主机没有RCA输出端口,这时主机的功放信号可以通过高端输入線,输入到高电平输入端口。

注意: 高電平和低電平不要同時輸入!

圖2

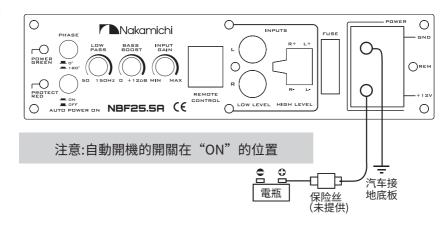


接主機喇叭輸出端子

電源輸入連接方式

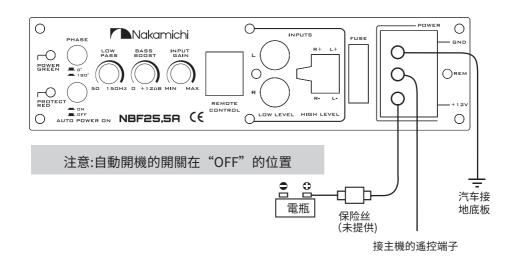
- 1.地線端子:連接地線端子到離有源音箱最近的汽車底板上,接地線用8AWG線(或大於8AWG)。
- 2.控制端子: 控制端子要用16AWG線(或大於16AWG) 連接到主機的遙控輸出端子。
- 3.+12V端子: 首先用40厘米左右長8AWG(或大於8AWG)的線,連接保險盒(不帶保險絲)壹端到汽車電 瓶的正極,保險盒的另壹端用8AWG的線連接到有源音箱的+12V輸入端子。確認連接無誤後,在保險盒裏 插入標稱規格的保險絲。

圖3



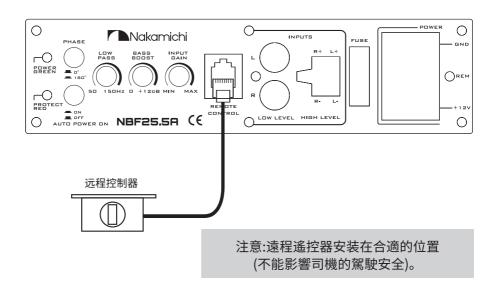
電源輸入連接方式

圖4



遠程電瓶控制連接

圖5



故障排除

遇见操作或性能上的问题,如果前面的介绍和说明未能帮到你成功解决,请阅读下面的故障排除技巧,希 望能帮助你解决问题。

故障現象	故障原因
HAT ナクレン	

產品不能啓動	- 檢查功放電源地綫是否連接良好。 - 檢查電瓶正極電壓是否加在功放的電源端子正極。 - 檢查遙控電壓不要低于5VDC。 - 檢查電源端子正極電壓不要低于+12V。 - 檢查保險絲是否損壞(開路)。 - 確認保護指示燈是否亮起,如指示燈亮起則重新啓動功放。
產品啓動後保護指示燈 亮起或過熱保護	- 調低音量電位器以防止過載保護。 - 檢查濾波器電位器大小是否合適。
產品无輸出	- 檢查保險絲是否損壞(開路)。 - 功放是否正確接地。 - 功放啓動電壓不要低于+12V。 - 檢查RCA音頻綫或高電平輸入綫是否確認連接到功放。
產品輸出低	- 重新設定音量電位器。 - 檢查濾波器電位器是否在正確的位置。
播放音樂時有嘶嘶聲	- 斷開功放的信號輸入線,如果嘶嘶聲消失就是信號源有問題,此時要確認 播放音樂時。- 有嘶嘶聲信號線是否連接良好,或信號線質量是否有問題,否則主機可能 有問題。- 盡可能把功放音量電位器開小,同時盡可能把主機音量開大(不要失真)。
有嘯叫聲	- 檢查RCA的地線是否連接好。
失真	- 檢查功放音量電位器是否過大了,功放音量電位器要配合好主機音量。 - 檢查濾波器電位器大小是否適合。
引擎聲 (靜態)	- 主要是RCA信號線質量太差的原因,要換用質量好的RCA信號線,並要遠 離電源線。
引擎聲(發電機火花聲)	- 檢查RCA信號線,其地線不能連接到汽車底盤。 - 檢查主機是否正確接地。

