



## **NBF150A**

**Spare Wheel Active Subwoofer** 

## **User Manual**

www.nakamichicaraudio.com



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#### PRODUCT INTRODUCTION

Thank you for choosing our spare wheel active subwoofer for your mobile sound system. This active subwoofer system utilizes the existing spare wheel, without taking up too much space in your trunk and it can be simply installed via the provided plug and play harness. This subwoofer allows you to maintain an original looking trunk, while having an awesome sound.

ACCESSORIES LIST	
1. Spare Wheel Active Subwoofer	1 piece
2. Owner's Manual	1 piece
3. Remote Control	1 piece
4. Mounting Screw With Nut (M8 x 185mm)	1 piece
5. Alignment Part	1 piece
6. Cable Holder Bar	1 piece
7. Cable Holder Screw (HM3 x 6mm)	2 piece
8. Cable	1 piece
9. Mounting screw( $\Phi$ 3x14mm)	2 piece

#### PRODUCT FEATURES

- Rigid sealed cast aluminum enclosure.
- Plug and Play connection system, easy to hook up.
- Aluminum speaker cone.
- Easy installation and removal.
- Built-in peak power 1000 Watts amplifier.
- Completely hidden installation and out of sight.
- Remote control provided for volume control.
- Automatic switch-on (The subwoofer's speaker-Level input and RCA input will sense
  voltage automatically on the speaker wires and the subwoofer will switches itself on if
  a music signal is received. If there is no more music signal, the subwoofer automatically
  switches off.)



## PRODUCT INFORMATION

ModelNBF150ASupply Voltage14.4V DCN-Power120 wattsPeak Power1000 wattsEnclosureSealed

Impedance 4 ohms + 4 ohms (Dual Speakers)

Frequency Response 20Hz - 200Hz Variable Crossover Frequencies 30Hz - 200Hz

Sensitivity 92dB

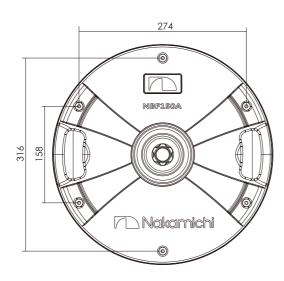
Input Level Speaker and RCA Level Inputs

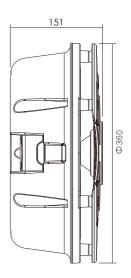
Fuse 15A Phase 0° / 180°

Speaker Size Dual 5x9" Woofer (229 x 135mm)

Net Weight Approx. 7.3 kg

## **DIMENSIONS (UNIT: MM)**





• Design and specifications are subject to change without notice.



#### INSTALLATION GUIDE

We strongly suggest you have the active subwoofer professionally installed, to achieve best results .Please read manual for more understanding.

## **▲** WARNING

- · Continuous listening at high sound level (above 110dB) can durably damage your hearing.
- Listening above 130dB can damage your hearing permanently.

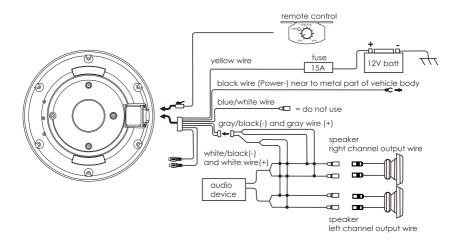
## NOTE

This subwoofer may be installed only in the spare wheel well, and it is designed to fit inside above 15 inches rim spare tires.

#### INSTALLATION PROCEDURE

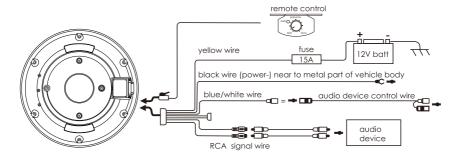
1. Use the supplied cable and wire harness and connect the outputs properly as shown in the High-Level & Low-Level inputs wiring diagram as following. Use only one of the audio inputs, otherwise, it may lead to audio interference.

Wiring Diagram1 (High Level Input)

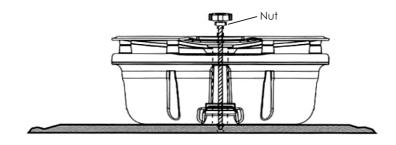




- A. With control via the high level input, first the speaker harness will need to be spliced the wire side of the splitter. Then connect the white wire to the left (+), white/black wire to the left (-) (It can be identified whether the left or right channel via the attached harness label), grey to the right (+), and grey/black to the right(-) corresponding vehicle wires, and finally plug the supplied harness into the high level input/power matching connector on the amplifier panel of the subwoofer.
- Wiring Diagram2 (Low Level 'RCA' Input)



- B. With control via the low level input (also referred to as RCA input), connect the blue color remote wire from the subwoofer to the vehicle's head unit so subwoofer will turn on and off with systems.
- 2. Securely mount the subwoofer to chassis with the provided bolt.

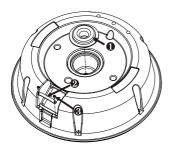




#### ALIGNMENT PART

The purpose of the alignment part allows you to make the gap width of the hole (where the threaded rod for spare wheel support is going to access) narrower if the subwoofer is unstable due to interference with the wheel or if the raised threaded rod for supporting in the trunk floor is too thin to secure the active subwoofer. This part could make sure the spare tire subwoofer mount stabler on the ride and keep your screw (which to fix the stock spare wheel location) aligned in the right direction.

- 1. For perfect results, ensure the surface being bonded is clean of all dust and dirt before operation.
- 2. Fix the alignment part on the recessed location by the self-adhesive tape (as is shown at the below figure), press it firmly to ensure the maximum adhesion.



- Alignment Part
- 2 Cable Holder Bar

Attaching a cable holder bar which enable you to keep away from messed up cables.

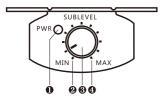
6 Cable Holder Screw

## **ADJUSTMENT**

## **A** WARNING

- If there is distortion or a popping noise from the subwoofer, the input level is too high.
- If the subwoofer has prolonged use in this condition, this may result in deterioration of performance or may cause damage to the subwoofer.

Remote Control (use  $\phi$  3X14 screw for the installation)



- Power Indicator
- Volume MIN
- Volume Knob
- Volume MAX



- Adjust the gain to MIN, PHASE to 0 degrees, L.P.F to CENTER before switching on the system.
- 2. Set the Bass/Treble adjustment to zero on the head unit. Set the volume to your average listening level. It may help to use a music source that is familiar.
- 3. Next, gradually increase the gain level. Increase the level to the point where the sound of your system, as a whole, is balanced. If the gain level is set too high, the subwoofer may begin to distort. Distortion may also occur if the volume is set too high on the headunit. Check that the other speakers have not begun to distort, before proceeding with the adjustment, If the entire speaker system in the car is distorting, reduce the volume of the head unit.
- 4. Once the gain has been set, adjust the L.P.F (Low Pass Filter) at a frequency which compliments your speaker system. (We recommend using CENTER as a starting point.)
- 5. Adjusting the L.P.F will change the output volume of the subwoofer. Repeat procedures 3 and 4 until the ideal setting is found.
- 6. The final adjustment is the phase of the subwoofer. While sitting in the driver's seat and with music playing, switch between NORM and REV. Select the setting which sounds better The ideal PHASE setting varies from car to car, depending on the locating of the subwoofer and the acoustic characteristics of the vehicle interior.





## NBF150A

有源備胎型低音箱

# 用戶手冊

www.nakamichicaraudio.com



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## 本機設備

感謝選用我們的有源備胎型低音箱作為您的移動音響設備。這款有源音箱系統利用了現有的輪胎孔的位置,因而不會佔用過多後備箱的位置。它可通過提供的線插進行簡易的安裝。

包装内物品	
1. 有源備胎型低音箱	1 個
2. 用戶手冊	1本
3. 線控盒	1 個
4. 安裝螺絲及螺母 ( M8x185mm )	1顆
5. 適配器	1 個
6. 撐線杆	1 條
7. 撐線螺絲 (HM3x6mm)	2 顆
8. 綫組	1條
9. 螺絲(Φ3x14mm)	2 顆

## 產品特點

- 高密度的鑄鋁密封箱體
- 便易的線插連接
- 鋁質喇叭底盆
- 拆裝簡易
- 内置功放(峰值功率1000W)
- 完全隱藏安裝,美觀
- 線控盒可調整音量
- 自動開關機(音箱的高頻輸入可自動感應喇叭線的電壓, 如接收到音訊信號,音箱會自動開啟,如沒有音訊信號, 音箱會自動關機)

# Nakamichi®

## 產品信息

型號 NBF150A 電壓 14.4V DC 額定功率 120W 最大峰值 1000W 箱體 密封

阻抗  $4\Omega + 4\Omega$  (雙揚聲器) 頻率響應 20 Hz - 200 Hz 可變的分頻頻率 30 Hz - 200 Hz

靈敏度 92dB

輸入電平 揚聲器和RCA電平輸入

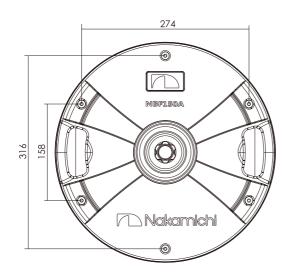
保險絲 15A

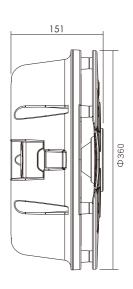
相位 0°/180°

揚聲器尺寸 雙低音揚聲器 5x9" (229x135mm)

淨重 大約7.3kg

## 尺寸(單位:MM)





·產品信息如有更改, 怒不另行通知。



## 安裝指引

我們強烈建議您找專業人員進行安裝。但如果您想獨自安裝,請在安裝前詳細閱讀這本手冊。

## ▲ 警告

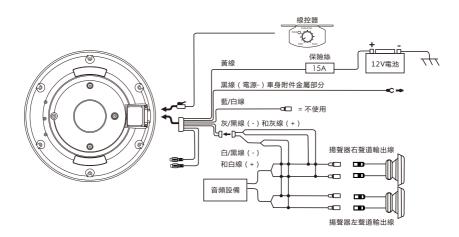
長時間處於高音量(110dB以上)的環境下,可能會對您的聽力造成一定的傷害;在130dB以上的高音量環境下,可能會對您的聽力造成永久性的傷害。

#### 注意

這款低音箱是安裝在後備胎孔內,只能安裝在直徑為15寸或以上的備胎的孔。

## 安裝步驟

- 1. 用提供的線插按下圖的高頻或低頻輸入進行連接,只能選用其中一種,否則會造成音頻干擾。
- ① 高電平輸入連接圖

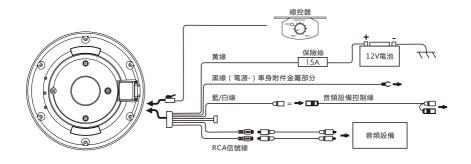


A. 通過高電平輸入控制。首先揚聲器線需要連接低音炮的接線端子;然後可通過辨認線上標識連接汽車對應的線,白線連接左(+)、白/黑線連接左(-),灰線連接右(+),灰/黑線連接右(-);最後對應音響的功能面板上的高頻輸入和電源,把接頭插上。

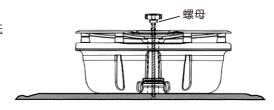


## ② 低電平RCA輸入連接圖

通過低電平輸入控制(即RCA輸入),通過音頻設備的藍色控制線連接到主機,音頻設備會隨系統自動開關機。



2. 用提供的安裝螺絲及螺母把有源低音箱牢固安裝在底盤。



#### 適配器

如果由於輪胎影響或者支撐後備箱門的升起的螺杆過薄,不足以固定有源低音箱,可用適配器把洞變窄(支撐有源備胎低音箱的位置)。適配器能確保備胎低音箱安裝更穩固,並能讓固定備胎低音箱的螺絲保持在同一方向。

- 1. 為了牢固安裝,操作前請確保粘合的表面無塵。
- 2.把適配器粘貼固定在凹位(如下圖),並確保粘貼牢固。

- ❶ 適配器
- ❷ 撐線杆(讓您理順線材,遠離混亂)
- ❸ 撐線螺絲



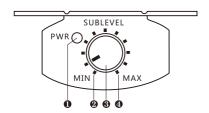


#### 設備調整

## ▲ 警告

- 如果有源備胎低音箱傳出失真的破裂聲,說明輸入電平過高;則需要進行適當的調整,以便有源低音箱正常運行。
- 如果有源備胎低音箱持續在過高的電平輸出狀態下工作,可能會本設備演繹效果變差,甚至造成設備損壞。

線控器(請用附件Φ3X14安裝)



- 電源指示燈
- ❷ 音量最小值
- ❸ 音量調整旋鈕
- **④** 音量最大值
- 1. 在開機前,把GAIN調到MIN,PHASE調到0°,LPF調到CENTER。
- 2. 把主機的BASS/TREBLE調到O, 把音量調到合適的音量, 這有助於使用熟悉的音源。
- 3. 逐步增加增益級別,一般來說,把增益調整到能使您的音響系統到達平衡的級別即可。如果增益級別設置過高,有源備胎低音箱可能會開始失真;如果主機的音量設置過高,也可能導致失真。在進行調整前,先檢查確保其他揚聲器沒有失真。如果整套車載音響失真,減少主機的音量。
- 4. 設置好增益後,調整L.P.F(低頻通道過濾)和您的揚聲器系統一致的頻率。建議使用CENTER作為起點。
- 5. 調整L.P.F會改變本設備的輸出音量,請重複第3步和第4步,直至找到合適的設置。
- 6. 最後調整本設備的相位。播放音樂時,請在0°和180°之間切換。一邊聽一邊選擇較好的設置。不同的車有不同的理想相位,這取決於本設備的安裝位置和原車的音箱。

