

# 專業揚聲器使用說明書

PROFESSIONAL LOUD-SPEAKER USER'S GUIDE



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技精于博 专注于声

首先，感謝您成爲著名專業揚聲器品牌-BOB-AUDIO的用戶，我們深深引以爲榮，并對於你的反映從未掉以輕心。BOB-AUDIO的產品是經過多年的精心設計與細心的制造的，從大教堂到迪士高、演藝廳到小型的會議廳、夜總會等場所。BOB都能提供適當的產品以配合需要。在使用您的系統之前請仔細閱讀以下說明，熟悉系統的特色、使用方法和注意事項，確保產品的耐用性和性能。以期您的產品得到最佳使用。

First, thank you for to be the user of famous professional loudspeaker brand - - - BOB Audio, which we are deeply pound of . We will take cautions about your suggest . The BOB - AUDIO product is carefully designed and meticulously made , from the big church to the disco , acting room to the small meeting room , KTV ect BOB can provide the require of the about Before you use the system , please read carefully about the instruction, know about the instruction , its useful way and notice , make sure all the durable and feture,expect the your product make the best used.

## 4.7 Operation

- All electric device can't be over loading or decreasing wave,it's easy destroy speaker.
- When it's over loading or decreasing wave,even if the power rate of amp is lower than the power rate of BOB speaker,it also will damage the speaker.
- Avoiding mike howling,it's easy damage high-driver.
- Avoiding over upgrade some frequency of EQ,it will causethe signal of some frequency overlade,we suggest through attenuation to get the effect,such as feedback reject,elimmate room syntonie.
- Somewhere the singal processor can raise the quality of sound,where as for room architecture issue,signal processor is useless,through putting speaker system at right position and orientation precisely project direction ensure more diretly sound to auditoria.
- Because the dB of BOB speaker is too high,it's will cause ear damage.
- Be careful handle.

## PART 5:MAINTENANCE

Usually BOB-speaker have no use for special maintain,in case of difficulty:

1. TESTING:Termly testing the equipment.Repeat the CD player,listen each speaker carefully and cheak the sound whether is normal,attention the program choice,should be clearly,full frequency,active ect,then test matil-volume:Low、Mid、High.
2. Install/Hanging:The abrasion termly inspect the safty,abrasion distortion of the speaker istall or hanging system.

## PART6: COMMON TROUBLE

### 6.1 No sound very low output SPL

1. Speaker connection problem.Cheaking all the continuous and connections.Change a good cable to reconnected and checked.
2. Please check the digital equitment.
- 3 The loudspeaker system is not work.Change a ok loudspeaker for testing,if cause by this reason,please contact with BOB after sale

### 6.2 Lack fidelity of sound

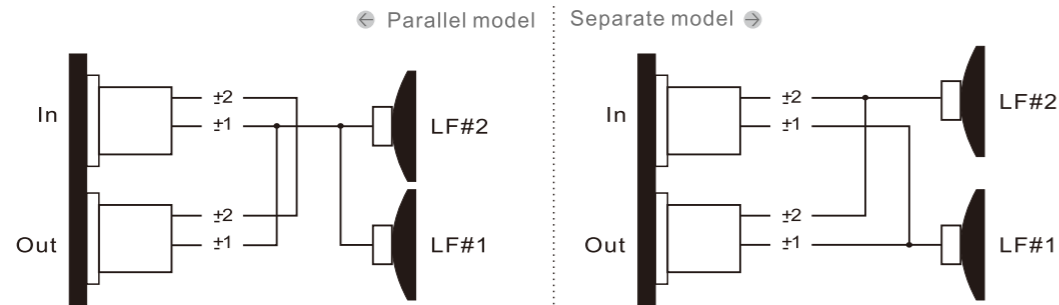
- 1.Power amplifier overlap.Please lower the signal level.
2. Other digital equitments overload.Please check all of them.
- 3 .Loudspeaker unit does not work normally.Please contact BOB after sale service.

### 6.3 No sound on some frequency range

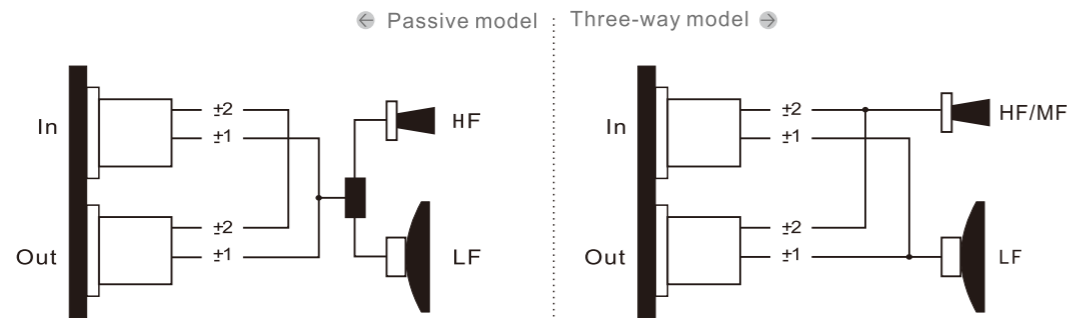
- 1.Balanced install is not right.Please make sure the tune,pre-amplifier and balance ect.All the filter and balanced installs must be setup correctly ,connect well.
- 2.The dealing install is not correct.please set the dealing install with the loud speaker system.
- 3.The input speaker models are not normal on its switch.Check about its pattern when correct or not:signle,bilateral and three-way amplifier drivers.
- 4.loud speaker unit does not work normally.Please contact with BOB service.
- 5.Speaker inter installed frequency is unnormal,please contact BOB.

### 4.5 Input setting

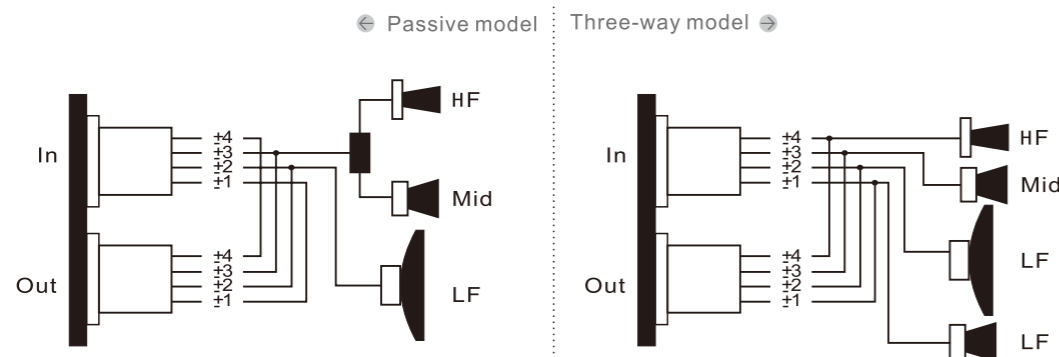
When turn the switch, the internal connection will change. Note:in the diagram,each line stands for two wires (e.g. +1 and -1 wire).



A--NL4 Input secondary connection board



B--NL4 Input two-way connection board



C--NL8 Input three-way connection board

### 4.6 Signal process

Many models of BOB enclosure need special signal processor,users may consult.BOB engineers,choose right processor for the different enclosure model.

BOB engineering team phone: +86 757 81108588

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www.bob-audio.com

01	重要说明
01	包装拆除
01	说明
01/04	操作
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08	The normal trouble

第一部分 重要說明

1.1 吊挂注意

當吊挂BOB音箱之前，用戶首先必須知曉額定負荷、吊挂技術，詳細考慮具體使用情況下專門的安全性問題，並採用音箱上專門的安裝/吊挂點進行安裝。除了測定負荷要求之外，還要測定動態負荷及所有影響音箱吊挂的因素，包括安全系數的考慮，連接結構件的安全性等。BOB-AUDIO強烈建議由獲得所在地區該方面安裝專門資質的人員從事這方面的工作。

**!** 注意：盡管用戶已經具備上述安裝吊挂資質，BOB 仍然堅持提供以下：

- A、文件：吊挂詳圖文件和部件列表的全部文件。
- B、分析：吊挂設計必須得到有資質的結構工程師、注册建築師或其他有資質的專業人員的審核和確認後，才能進行安裝。
- C、吊挂系統必須由有資質的專業安裝人員安裝并檢查。

**!** 危險：

音箱系統必須由具有硬件和懸吊技術知識的人員吊挂，對方或直接安裝在支架上時也要充分考慮其穩定性和當受到外力作用時或不慎撞落時的安全性，防止出現設備損壞或人員傷亡。

第二部分 包裝拆除

2.1 運輸損失

拆裝前，仔細檢查外包裝，如有任何損壞，請在運輸單上標明相關情況。拆包後，如發現損壞，請保留包裝材料，并在第一時間通知運輸公司前來檢查確認。BOB會盡力協助辦理相關事宜，但產品接收方式應該作為權益主體行使責權。

2.2 產品返回BOB

當需要將音箱返回BOB時，請先得到BOB用戶服務部的返回確認。注意采用包裝和原包裝材料，如果原包裝箱已經報缺損，請聯系BOB購買專門新的包裝箱，否則，BOB將不承擔由于包裝運輸原因造成的損壞的責任。

第三部分 說明

3.1 系統概述

BOB揚聲器系統是為專業擴聲而專門設計生產的，機構、單元、配件經久堅固耐用，用戶使用時務請首先詳細了解其安裝和操作方法。

第四部分 操作

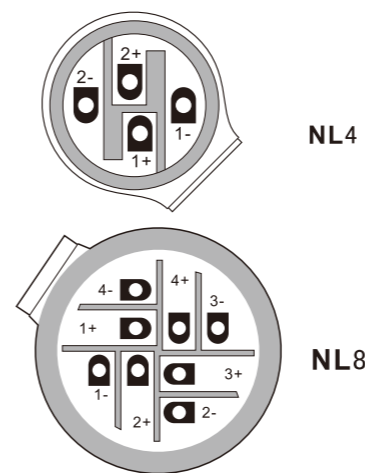
4.1 功率放大器功率要求

功率放大器功率要求應該說是沒有一個絕對的答案。BOB產品技術說明中所標明的額定功率均通過標準噪聲測量，可作為設計時的參考。注意該額定功率并不完全與所采用的功率放大器的功率成正比，在配置放大器時，需要根據聲壓級要求和信號源類型統籌考慮，請諮詢專業擴聲顧問或直接與BOB工程支持團隊聯系(詳見4.6)。

不恰當地使用功率放大器，如放大器功率低于揚聲器系統的額定功率并引起放大器削波時，會嚴重損壞揚聲器系統。

4.2 Audio Signal Connection

The audio frequency signal connect loudspeaker connect ports are as followed:



NL4 full range		NL4 twoway amp driver	
1-	Negative	1-	LF or LF/MF negative
1+	Nonnegative	1+	LF or LF/MF positive
2-	Levitation	2-	MF/HF or HF negative
2+	Levitation	2+	MF/HF or HF positive

NL4 subwoofer		NL8 3-way amp driver	
1-	LF negative	1-	Levitation LF negative
1+	Lfnonnegative	1+	Levitation LF nonnegative
2-	Straight connection	2-	LF negative
2+	Straight connection	2+	LF nonnegative
		3-	MF negative
		3+	MF nonnegative
		4-	HF negative
		4+	HF nonnegative

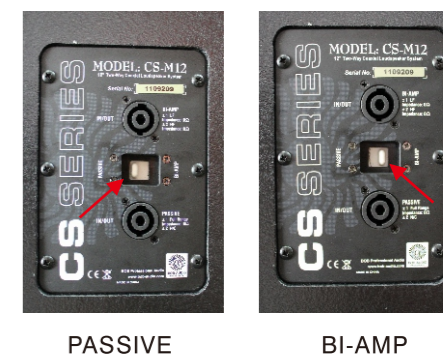
The connection insert select(from the insert wire side)

4.3 Input Plate

All the BOB speaker are installed with internal network switch, which is better for install the system more conveniently. Just turn the switch, can change to full range or bi-amp.

Operational means:

- A: switch to "PASSIVE", work on full range status
- B: switch to "BI-AMP", work on bi-amp status



4.4 Cable

All connection from amp to speaker,should choose standard cable,avoiding loss by connection,reference those figure and chose right cable,when the cable is more than 200 feet/8Ω or 100 feet/4Ω,usually use 10/25.

Wide	8Ω	4Ω
	uk / metric	uk / metric
10 ft / 3 m	16 / 14	14 / 16
25 ft / 8 m	14 / 16	12 / 20
50 ft / 15 m	12 / 20	10 / 25
>75 ft / 25 m	10 / 25	10 / 25

Speaker caber mininum require

## PART1: Warning

### 1.1 Rigging Warning

Before hanging BOB speaker, user should know all rated load, hanging technical, all safety factor in a special place and install/hanging point in fixed place. Except test rated load, also need to know dynamic loading and all other factor which will effect the speaker, including safety factor, connector component safety etc. BOB-Audio strongly recommed use career man. which engage in this field install those speaker.

**!** Caution: since user have this quality, we still insist provide follow stuff to customer.

- A. File: hanging drawing files and all files of component list.
- B. Analysis: hanging design should get structure engineer registered architect of other professional worker. Auditing and confirm, then you can start install.
- C. hanging system should be install by profession worker and inspect.

**!** Warning:

Speaker system must install by the people who have such skill and knowledge, when user want to install speaker in bracket directly consider stability and outside force effect or the safety of dropping, avoid speaker destroy or casualty.

## PART2: Packing Demolition

### 2.1 Transport losses

Check out side package before open it, and marlc on the transport bill if there is any damage. Any damage is found after opened the package, please keep the packing material and notify the transportation company the first time, BOB will help the related matters but the way of product receiving should be the power and interests main to perform responsibility.

### 2.2 Return the product to BOB

Please get the product return confirmation from BOB customer service before return the product to BOB. Regards package and packing material if the original package is broken or lost. Please contact BOB to buy the new packing material, or BOB will not take the responsibility of any damage during transportation.

## PART3: Instruction

### 3.1 System Summarization

BOB speaker is specialise designed for professional PA construction, unit accessories durable, users please read the installaiton and operation method.

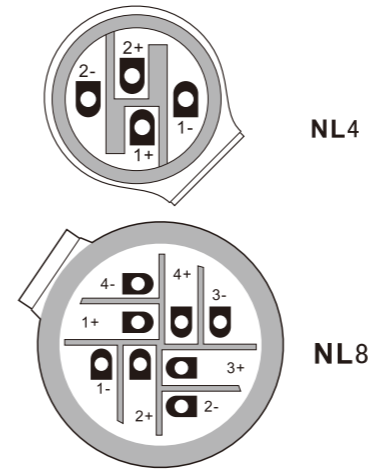
## PART4: Operation

### 4.1 The power of amplifier requirement

There is no absolute power for Amplifier. In BOB product technology description, rated power are past the standard noise test, it can be take as reference in design, noted that rated power is not exactly as same as the power of amplifier. When collocate the amplifier it need cosidera SPL and signal source type. Please consult professional consultants or contact with BOB engineer. Amplifier unrightly used such as amphfier rate is lower than rated power of speaker system and the ware is decreased the speaker system will be damage badly.

### 4.2 音頻信號連接

揚聲器連接端口如下圖所示，管腳連接見下表。具體還要參照音箱輸入面板上的標識。



NL4全頻		NL4雙路功放驅動	
脚1-	負	脚1-	低或低/中频負
脚1+	正	脚1+	低或低/中频負
脚2-	懸空	脚2-	中/高或高频負
脚2+	懸空	脚2+	中/高或高频負

NL4單單元低音箱		NL8三路功放驅動	
脚1-	低音單元負	脚1-	懸空低音單元負
脚1+	低音單元正	脚1+	懸空低音單元正
脚2-	线路直通	脚2-	低音單元負
脚2+	线路直通	脚2+	低音單元正
		脚3-	中音單元負
		脚3+	中音單元正
		脚4-	高音單元負
		脚4+	高音單元正

连接端口示意图（从接线端侧看去）

### 4.3 輸入面板

所有的BOB音箱大部分都裝有內部網絡模式選擇器。這種設計有個好處是為以後的設備升級，音響系統設計師可以作靈活性的安裝設計。祇要撥動面板上的選擇開關，就可以將系統改裝為雙擴音或被動系統。

使用方法如下：

- A: 當開關向(PASSIVE)撥動, 音箱的接入狀態是內置全頻輸入。
- B: 當開關向(BI-AMP)撥動, 音箱的接入狀態是外置分頻輸入。



內分頻輸入

外分頻輸入

### 4.4 音箱綫

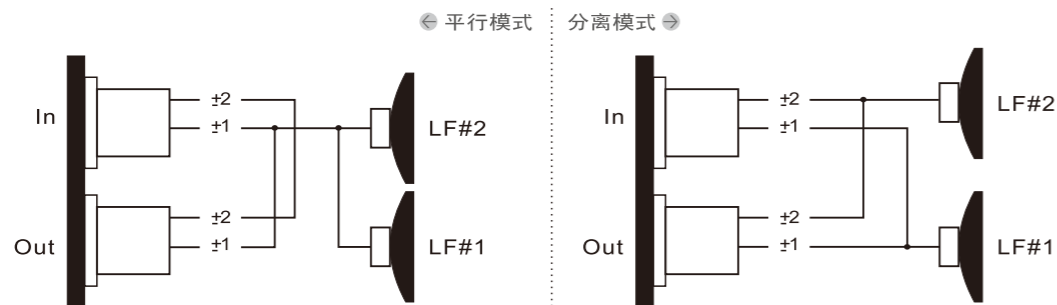
所有從功率放大器到揚聲器的連接，應使用適當的標準電纜，盡量減少插頭連接的損失。使用此表選擇揚聲器電纜的長度并決定所需電纜的大小。當音箱綫度超過200英尺/80或100英寸/40時，一般最多也就采用10/25。

线 长	8Ω 扬声器	4Ω 扬声器
	英制/公制	英制/公制
10 ft / 3 m	16 / 14	14 / 16
25 ft / 8 m	14 / 16	12 / 20
50 ft / 15 m	12 / 20	10 / 25
超过75 ft / 25 m	10 / 25	10 / 25

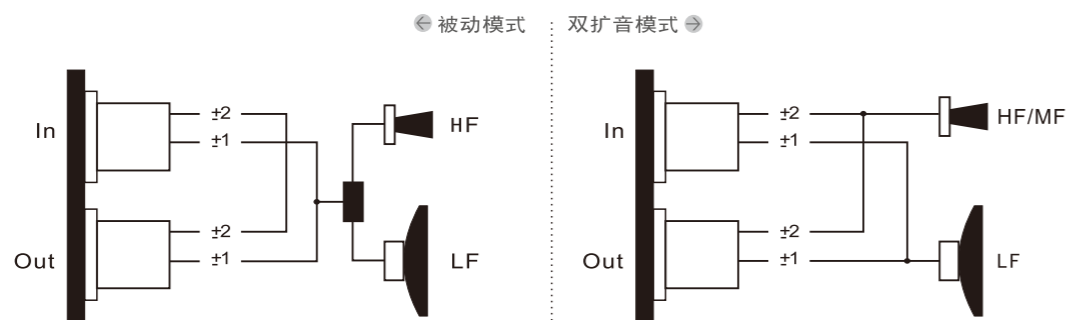
音箱綫规格尺寸最低要求

## 4.5 輸入設定

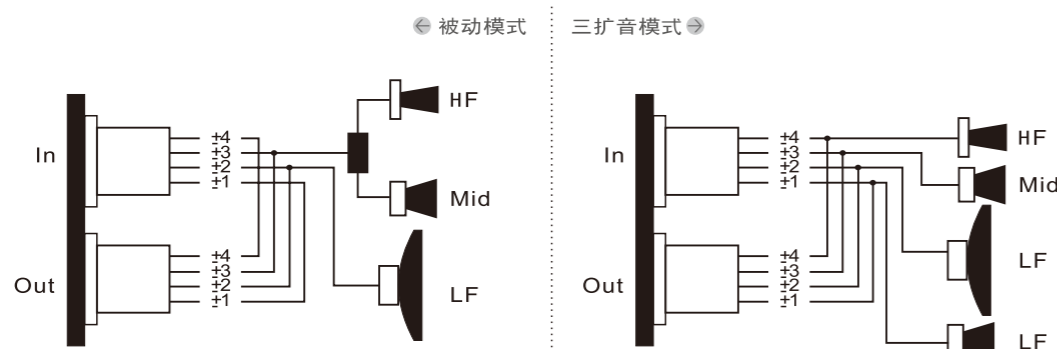
當改變撥動開關的位置，從輸入面板連接到功率傳送器的電纜連接方式會有所改變。注意：圖內各條線代表一對電纜。（例如：+1和-1連接電纜）。



A--有 NL4 輸入的次級接頭面板



B--有 NL4 輸入的雙向接頭面板



C--有 NL8 輸入的三向接頭面板

## 4.6 信號處理

BOB很多型號音箱需要採用專門的信號處理設備，用戶請諮詢BOB的工程支持團隊，根據音箱型號選擇恰當處理器和設置。

BOB工程支持團隊電話：+86 757 81108588

e-mail:bob@bob-audio.com 網址：www.bob-audio.com

## 4.7 操作小貼示

- 請保證所有電子設備不要出現過載削波，尤其是功率放大器，否則非常容易損壞音箱。
- 當出現過載削波時，哪怕放大器的額定功率低於BOB音箱的額定功率，也會損壞音箱。
- 盡量避免話筒出現嘯叫，這樣容易損壞中高頻單元。
- 避免過度提升均衡器的某一頻段，這會引起該段的信號過載，建議通過衰減達到頻響校準的目的，如反饋抵制、消除房間共振等。
- 信號處理是在一定程度上提高聲音表現，但是，對於房間建築聲學問題，信號處理往往無濟于事，最好的解決方法是對揚聲器系統的擺放位置和投射方向進行精確定位，保證聽眾區有更多的直達聲能量。
- BOB揚聲器系統輻射的聲壓級很高，高到足以對人的聽力產生損害，務請注意對操作者和觀眾的聽力保護。
- 小心輕放，注意安全。

## 第五部分 維護

正常使用情況下BOB音箱不需要特別維護，建議如下常規檢查即可：

- 1、測試：定期測試保持性能特性。簡單的方法是通過CD經由音箱重放，仔細傾聽音箱的每個揚聲器單元是否聲音正常，有無失真或異常聲，注意節目源的選擇，需要採用清晰細膩、頻譜豐滿、動態寬廣的節目源，並在多個音量聲級下試聽：低、中、高。
- 2、安裝/吊挂：必須定期檢查音箱安裝或吊挂件的安全、磨損、變形、腐蝕等影響荷載的因素，確保正常。
- 3、清潔：採用幹、濕布或家用清潔劑清除音箱污漬，避免採用可能損壞音箱表面塗層的強力清洗劑。
- 4、表面劃傷或凹痕處理：淺表較小的可採用戶外乳膠漆或直接塗上類似的顏色遮掩，較為嚴重的鑿痕和凹痕需要填充木油灰後再重新油漆。

## 第六部分 常見故障 揚聲器系統的常見故障如下（按照出現頻次排列）：

### 6.1 沒有聲音或輸出聲壓級很低

- 1、音箱連接或端口問題。檢查所有連線和端口是否連接正常、接觸良好。換一根確定是好的電纜重新連接一下就可以證實是否是該原因所造成的故障。
- 2、電子設備沒有打開或電平設置不合適。請仔細檢查每級設備的狀態。
- 3、揚聲器系統不工作。換一祇好的音箱試一下，如果是該原因所造成的故障，請即聯系BOB售後服務。

### 6.2 聲音失真

- 1、功率放大器過載。請降低信號電平。
- 2、其他電子設備過載。請仔細檢查每級設備。
- 3、揚聲器單元工作不正常。請即聯系BOB售後服務。

### 6.3 某些頻段沒有聲音

- 1、均衡設置不正確。請確保調音臺、前置放大器、均衡器等所有設備的濾波和均衡設置正確、工作正常、連接良好。
- 2、處理器設置不正確。請處理器設置與揚聲器系統相適配。
- 3、音箱輸入面板模式開關不正確。請確保模式開關是否在正確的狀態：單路、雙路、三路功放驅動。
- 4、揚聲器單元工作不正常。請即聯系BOB售後服務。
- 5、音箱內置分頻網絡不正常。請即聯系BOB售後服務。