

**marantz**  
***PROFESSIONAL***

**MZK88 User Guide**

**MZK88 使用说明书**

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**Karaoke Digital Amplifier**

**卡拉 OK 数码放大器**



感谢您惠购 **marantz** MZK88卡拉OK数码放大器。

在使用卡拉OK数码放大器之前，请务必通读本使用手册，以利用好MZK88的所有功能。读完之后，请将本手册和保修书妥善保管，以备将来查阅。

本手册对于理解卡拉OK数码放大器和解决使用中出现问题很有帮助。

## 主要性能

- 输出功率 200W+200W+200W (8 Ω 10%THD)
- 6 线输入：自动按序优先功能
- 内置高质量数字回音
- 可同时使用 5 支麦克风
- 内置主调遥控器：在 ±6 个方位上允许变换 ±3.0 个音调（曲终时自动复原）
- 低音增强功能
- 无线遥控装置（可调节音乐音量、麦克风音量、主调控制器）

## 目录

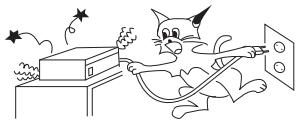
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# 警告

- 不要让本器材曝露于雨水或湿气之中。
- 不要移除本器材的外盖。
- 不要从通风孔将任何物品推入本器材内。
- 不要用潮湿的手处理主电源电线。
- 不要使诸如桌布, 报纸, 窗帘等任何物品遮盖住通风口。
- 不要将诸如点燃的蜡烛等明火火源置于本器材上。
- 当丢弃废旧的电池之前, 请遵守当地的政府法规及环境保护规则。
- 在功放机的各侧保留 0.1 米的空间。
- 切勿将盛有液体的物品, 如花瓶, 置于本机上。
- 当开关位于 OFF 处时, 本设备并未完全与 MAINS 切断。
- 为使本产品与主电源完全分离, 要求使用时能从电源插座上拔下插头。
- 使用时, 为了完全切断主电源与本产品的连接, 请将本产品的插头放在近旁, 使其能够立刻从电源插座上拔下插头。

## 安全注意事项

### 万一发现异常



在使用时万一发现有异常的噪音或气味产生, 请立即关闭电源, 从插座上拔下电源线, 并向经销商或维修中心咨询, 要求做一次检查。

### 勿擅自打开本体

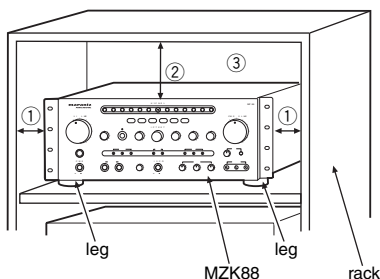


本体中使用了高压元件。请勿打开外壳, 试图检查或改装本体, 以免遭受电击的危险。由于用户的改装而引起机器功能下降或是误操作, 将不属于产品质量保证范围之内。

### 请勿超过最大功率容量



后面板 AC OUTLETS 端的部件与其他立体声系统的部件连接。但是, 请勿连接总功耗超过后面板标出的功率容量的部件。否则会引起故障或火灾。同时也请注意: 电源打开时, 不能将有大电流流过的部件(例如电视机)连接到 AC 输出口, 除非它已经设计成能与这类设备连接。



机架尺寸必须遵守下面的测量规定:

- ① MZK88 的 R/L 侧和机架的 R/L 侧之间的距离应大于 5cm。
- ② MZK88 上侧和机架之间的距离应大于 20cm。
- ③ 机架后方必须敞开。※请勿拆除支架腿。

### 严禁水滴和异物



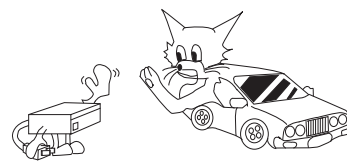
切勿从本体的通气孔或其他开口处插入或掉入象发夹、铁钉和硬币之类的金属物以及诸如纸张、火柴之类的易燃物, 因为这会引起勿操作或是火灾和电击。万一水滴或异物进入了本体, 请让维修中心或经销商做一次检查。

### 不要损坏电源线



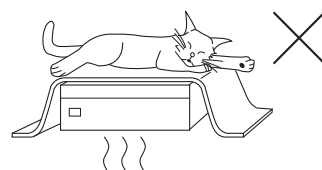
在插上或是拔下电源线时请握住电源线的插头部分。不要用湿的手去拔取或触摸电源线, 这会导致短路或是触电事故。不要将电源线铺设在本体和家具之下, 物体之间。也不要将电源线和其他的电源线捆在一起, 不要给电源线打结或是将其放置在人经常走动的地方。

### 当长期不使用时



当您长时间不在家时, 例如外出旅游等, 请关掉电源并从电源插座上拔下电源线。这将防止由于本体的意外情况而引起的火灾。

### 使用时的通风



不能遮挡或遮盖本体的通风口。万一产生这种情形, 本体内部的温度将上升并引起火灾。在本体外壳的上下部都开设有通风口以防止本体过热。

# 使用注意事项

勿将本体设置在下列场所：

- 遭受直射阳光或附近有诸如取暖器之类的散热源的地方。
- 因通风差而不易散热的地方，或是非常潮湿、多尘的场所。
- 多振动或有斜面的不安稳之处。
- 靠近窗边等有雨水的地方。
- 靠近厨房等散发煤烟、蒸汽或热量的地方。

在机架内固定时的注意事项

- 为了避开本产品散发的热量，固定时请分别与本产品的顶部和底部保持 1U 以上的空间。

## 连接前的准备

连接注意事项

- 在做任何连接之前，确认各有关的电器设备的电源都处于关闭状态。
- 功放机上“白色”的输入 / 输出插孔是用来连接左声道，而“红色”插孔是用来连接右声道的。确认左、右声道，是否被正确地连接。
- 将所要连接的导线的插头完全地插入插孔。如果连接不完全的话。可能不产生音响或是出现噪音。
- 当从电源插座上拔下电源线时，必须握住电源线插头部分的塑造物拔取。

AC 电源输出出口的功耗

- 注意，总功耗不能超过后面板标出的瓦数。除系统部件外，请勿将其他设备连接到本机的电源输出口。
- 请勿将电视机连接至本机，即使电视机标出的功耗值小于允许值，因为当电视机打开时，功耗会增大。

「根据电子信息产品污染控制管理办法的有毒·有害物质或元素的标识表」

零部件名称	对象零部件	有毒有害物质或元素						备注
		铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr6+)	多溴联苯 (PBB)	多溴二苯醚 (PBDE)	
电路板	电路板组件，安装·插入零部件，电路板（不包括特定电子零部件）	X	○	X	○	○	○	
机壳	顶盖，底盖，底壳，框架，垫片，螺丝等（金属，塑胶），（包含的接合材料）	X	○	○	○	○	○	
特定电子零部件	变压器，插入物，电源插座，电源用大型电解质电容器等电子零部件，机内连接线	X	○	○	○	○	○	
附件	遥控器 / AC 适配器、电源线、RCA 信号线等附件，包装	X	○	○	○	○	○	

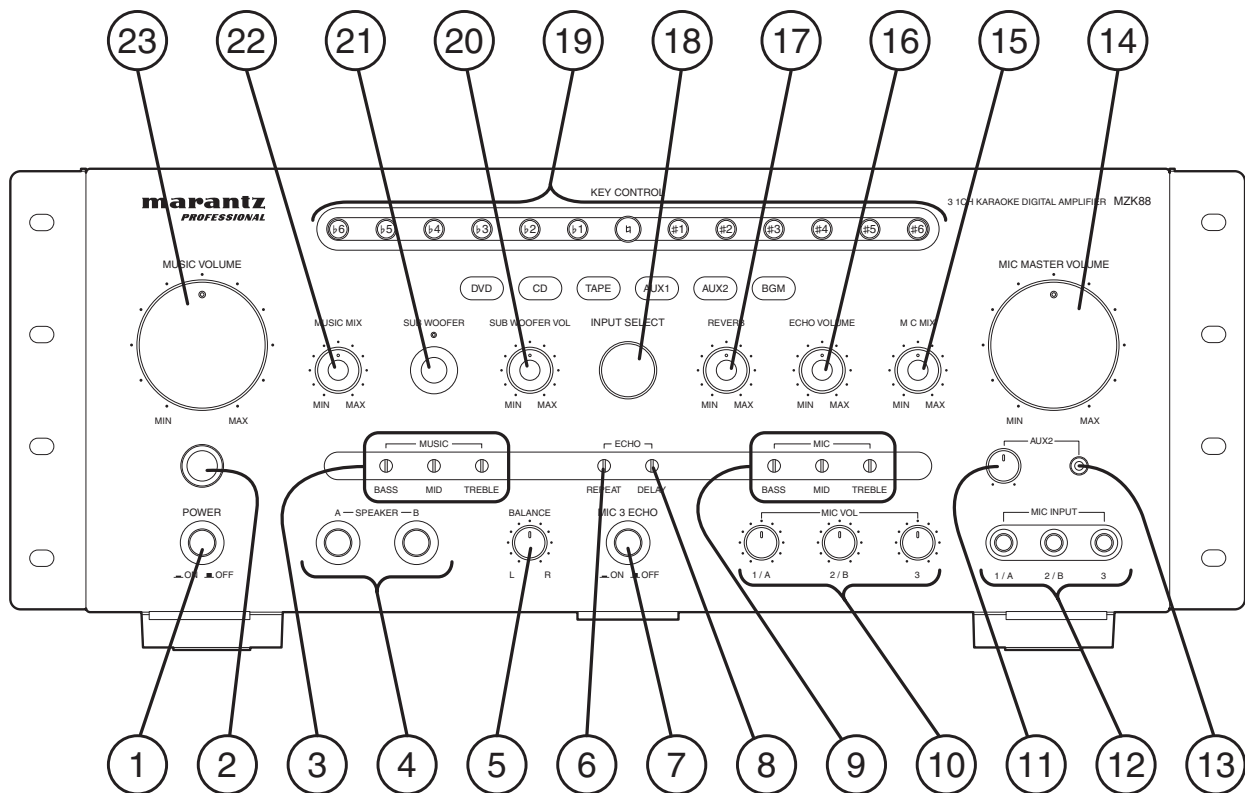
备注：  
 ○：在该零部件的所有均质材料中的有毒有害物质的含量不超过在 SJ / T11363 - 2006 标准规定的限量要求  
 X：在该零部件中至少一种均质材料中的有毒有害物质的含量超过在 SJ / T11363 - 2006 标准规定的限量要求  
 （X 判定：包括 EU RoHS 的豁免项目）



此标志是根据 2006 / 2 / 28 颁布的「电子信息产品污染控制管理办法」，以及「电子信息产品污染控制标识要求」，适用于在中国销售的电子信息产品的环保使用期限。只要遵守此产品相关的安全和使用注意事项，在从生产日期起计算的此年限内，产品中的有害物质不会往外泄漏，或者引起突然变异而给环境污染，人体或财产带来重大影响。另外，包装在一起的电池等消耗品的环保期限的技术寿命为 5 年。产品使用终结需废弃时，请遵守当地的电子信息产品回收·再利用相关的法律·规定。

# 部件名称及其功能

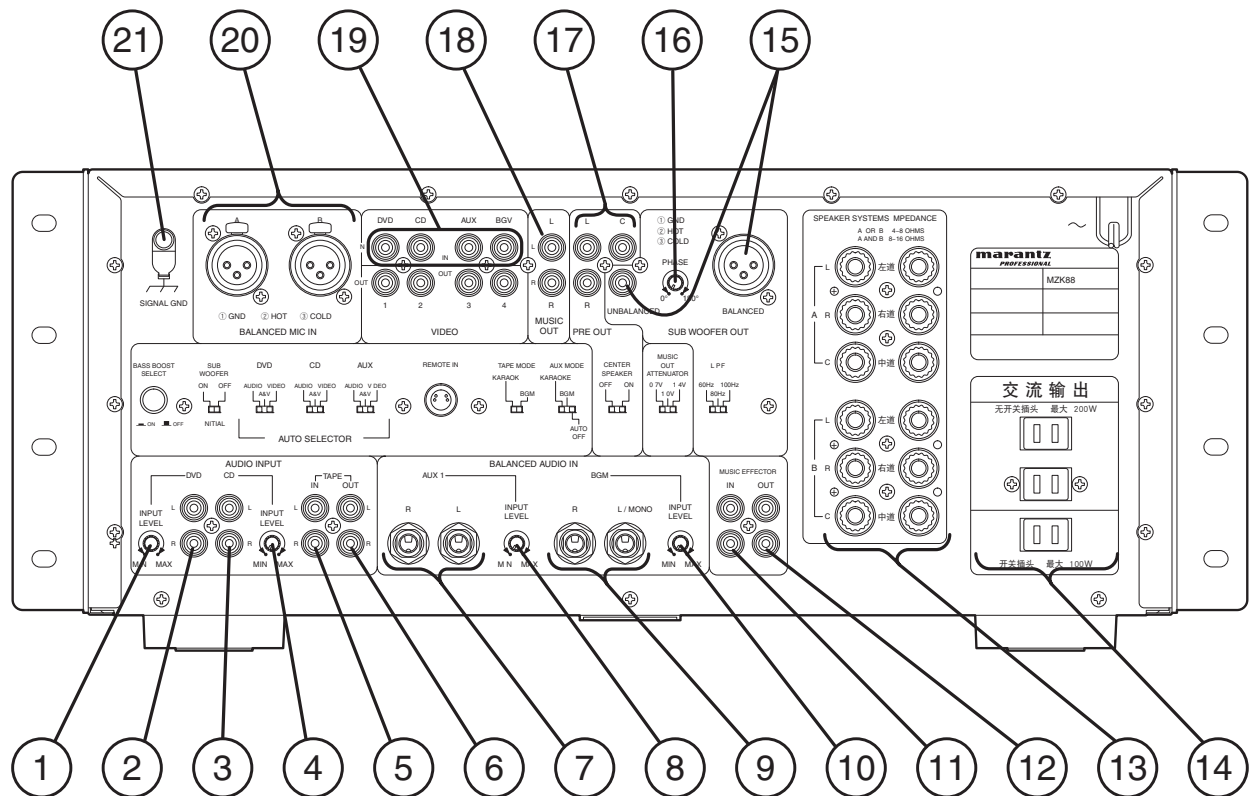
## 前面板



- ① **POWER Switch 电源开关 (ON /OFF)**  
按下开关接通电源,再一次按下开关时将切断电源。
- ② **REMOTE SENSOR 遥感器**  
红外线传感器装于此处。用于接收附带的无线遥控器 (RC88MZK) 发出的信号。
- ③ **MUSIC TONE (BASS/MID/TREBLE) 音乐音质 (低音 / 中音 / 高音)**  
本控制装置用于增强或截止 (低频 / 中频 / 高频) 频率响应。
- ④ **SPEAKER A, B Select Switch 扬声器 AB 选择开关**  
从与扬声器插孔连接的扬声器中,选择由扬声器 A 或 B 输出语音、或者是 A 和 B 同时输出。
- ⑤ **BALANCE Control 平衡控制装置**  
此装置用于调解左右声道间的音量平衡。
- ⑥ **ECHO REPEAT 回音重复**  
本控制装置用于调节重复的间隔。
- ⑦ **MIC 3 ECHO ON/OFF SWITCH 麦克风 3 回音打开 / 关闭开关**  
按此开关打开麦克风 3 回音。  
再按一次此开关关闭麦克风 3 回音。
- ⑧ **ECHO DELAY 回音延迟**  
本控制装置用于调节延迟时间。
- ⑨ **MIC TONE (BASS/MID/TREBLE) 麦克风音质 (低音 / 中音 / 高音)**  
本控制装置用于增强或截止麦克风的 (低频 / 中频 / 高频) 频率响应。
- ⑩ **MIC VOL Controls 麦克风音量控制 (1/A, 2/B, 3)**  
这些控制装置用于调节 MIC INPUT 1/ 2/ 3 插孔 (前面板) 和 MIC INPUT A/ B 插孔 (后面板) 的麦克风输入电平。
- ⑪ **AUX2 INPUT LEVEL Control AUX 输入电平调节**  
为了调节其他输入信号,需要调节 AUX2 的输入平衡开关。

- ⑫ **MIC INPUT Jacks (1/2/3) 麦克风输入插孔 (1/2/3)**  
这些插孔用于连接麦克风。
- ⑬ **AUX2 audio input jack AUX2 音频输入插孔**  
此类插孔与磁带、视频等其他输出插头连接。
- ⑭ **MIC MASTER VOL Control 麦克风主音量控制装置**  
此装置用于调节所有麦克风的总音量。
- ⑮ **MIC MIX VOL Control 麦克风混音音量调节**  
本控制装置用于调节左右扬声器输出的麦克风混音音量。
- ⑯ **ECHO VOL Control 回音音量控制**  
本控制影响混入麦克风输入到 MIC INPUT 1, 2 和 3 插孔以及 MIC INPUT A 和 B 插孔的回音音量。
- ⑰ **REVERB VOL Control 混响调节**  
本控制装置用于调节从 MIC INPUT 1、2 和 3 插孔以及 MIC INPUT A 和 B 插孔的麦克风输入的混响音量。
- ⑱ **INPUT SELECT Switch 输入选择开关**  
本显示点亮当前功能。  
当 AUX MODE AUTO SELECTOR 开关设为 AUTO OFF 时 (后面板), 此开关可用来改变输入信号。
- ⑲ **DIGITAL KEY CONTROLLER 数字式主调控制器**  
按下所需的按钮以改变再生音乐的主调。主调将在上升和下降两个方面各分 6 档、每档半个音调的量进行变化。(一曲再生结束后音调将自动回复到标准主调上。)
- ⑳ **SUB WOOFER VOL Control 重低音扬声器音量调节**  
本控制装置用于调节重低音扬声器的音量。
- ㉑ **SUB WOOFER ON/OFF Switch 重低音扬声器开关**  
按此开关切换重低音扬声器输出的开与关。  
重低音扬声器电源处于打开状态时, 蓝色指示灯亮。
- ㉒ **MUSIC MIX VOL Control 音乐混音音量调节**  
本控制装置用于调节中置扬声器输出的音乐的混音音量。
- ㉓ **MUSIC VOL Control 音乐音量控制装置**  
此装置用于调节音乐源的音量。  
(BGM 的音量从后面板上的 BGM INPUT LEVEL 控制装置进行控制。)

## 后面板



- ① **DVD INPUT LEVEL Control DVD 输入强度控制装置**  
调节此控制装置以平衡 DVD 输入相对于其他输入（辅助）的强度。
- ② **DVD AUDIO INPUT jacks DVD 音频输入插孔**  
将 DVD 机的输出插孔连接至这些插孔。
- ③ **CD AUDIO INPUT jacks CD 音频输入插孔**  
将卡拉 OK 设备的输出插孔连接至这些插孔。
- ④ **CD INPUT LEVEL Control CD 输入强度控制装置**  
调节此控制装置以平衡相对于其他输入（DVD, AUX, TAPE）的 CD 输入强度。
- ⑤ **TAPE INPUT jacks TAPE 输入插孔**  
将 TAPE 播放器、VCR 等输出插孔连接至这些插孔。这些是平衡输入端。
- ⑥ **TAPE OUTPUT jacks TAPE 输出插孔**  
将 TAPE 播放器、VCR 等的输入插孔连接至这些插孔。
- ⑦ **AUX 1 AUDIO INPUT jacks AUX 音频输入插孔**  
将 TAPE 播放器、VCR 等输出插孔连接至这些插孔。这些是平衡输入端。请参阅第 9 页连接。
- ⑧ **AUX 1 INPUT LEVEL Control 辅助输入强度控制装置**  
调节此控制装置以平衡辅助输入相对于其他输入（DVD, CD, TAPE）的强度。
- ⑨ **BGM AUDIO INPUT jacks BGM 音频输入插孔**  
将 BGM 功放的输出插孔连接至这些插孔。使用 L 插孔作为单声道音源输入。这些是平衡输入端。请参阅第 9 页连接。
- ⑩ **BGM INPUT LEVEL Control 磁带输入强度控制装置**  
调节此控制装置以平衡相对于其他输入（DVD, CD, AUX）的磁带输入强度。
- ⑪ **MUSIC EFFECTOR input jacks 音效器输入插孔**  
将扩充音效器输出插孔连接至这些插孔。插入时内部连接自动分开。



⑫ **MUSIC EFECTOR output jacks 音效器输出插孔**

将扩充音效器的输入插孔连接至这些插孔。

⑬ **SPEAKER SYSTEM Terminals 扬声器系统终端**

将扬声器系统与这些插孔连接。

⑭ **AC OUTLETS 交流输出**

将此插头插入墙上的交流输出插孔。

SWITCHED 转换 (最大总功耗: 100W)

本机前面板上的电源开关设为 ON 或 OFF 时, 打开或关闭连接于本机的部件 (部件的电源开关设为 ON) 的电源。

UNSWITCHED 不转换 (最大总功耗: 200W)

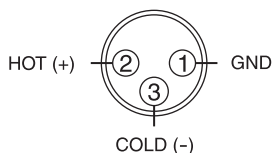
无论本机前面板上的电源开关设定如何, 电源始终通过这些输出插孔供给。(在这种情况下, 所连接部件的电源要用各部件的电源开关打开和关闭。)

注意: 不要将非系统部件 (例如电视机) 连接到这些交流输出插孔。

⑮ **SUB WOOFER jack with low-pass filter 带低通滤波器的重低音扬声器插孔**

连接带低通滤波器的重低音扬声器的输入插孔。

该插孔直接输出单声道信号。



⑯ **SUB WOOFER PHASE Control 重低音扬声器相位调节**

本控制装置用于在 0° 到 180° 的范围内调节重低音扬声器的输出相位。

请设定此开关, 以提供最佳效果的低音。

⑰ **PRE output jacks 前级输出插孔**

将扩充功率放大器的输入插孔连接至这些插孔。

⑱ **MUSIC OUTPUT jacks 辅助音频输入插孔**

将扩充功率放大器的输入插孔连接至这些插孔。仅输出音频信号。

⑲ **VIDEO input jacks 视频输出插孔**

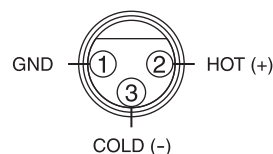
将此输入插孔连接至 DVD、CD、AUX、BGM 播放器或摄像机等的视频输出端。

⑳ **BALANCED MIC. INPUT jacks (A/B) 平衡麦克风输入插孔 (A/B)**

这些插孔用于连接麦克风。A 插孔连接到与前面板上 MIC INPUT 1 插孔和 B 插孔连接到与前面板上 MIC INPUT 2 插孔相同的电路。

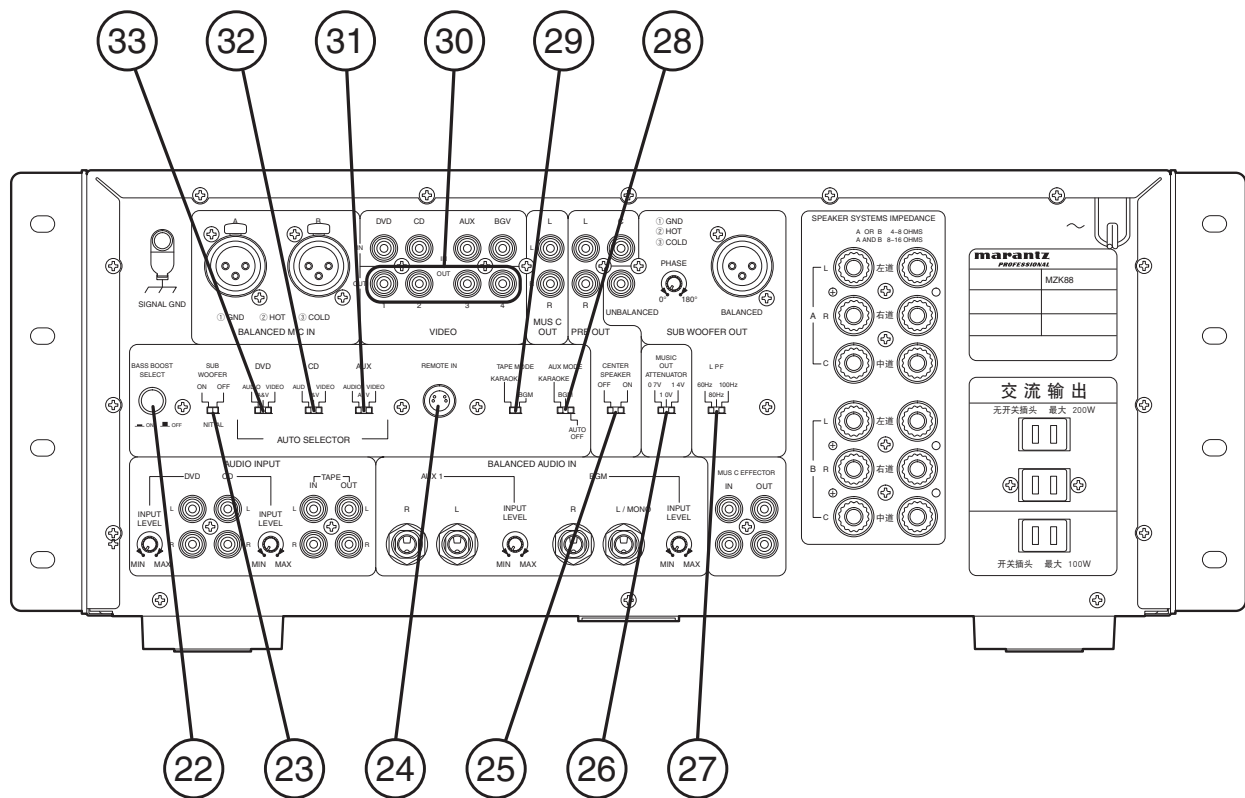
这些是平衡输入端。

请参阅第 9 页连接。



㉑ **SIGNAL GROUND Terminal 信号接地端子**

如果连接放大器时发出噪声, 请连接此端子。



②② MUSIC BASS BOOST Switch 音乐低音增强开关

按此开关，低音增强功能打开。再按一次，低音增强功能关闭。

②③ SUB WOOFER Initial Switch 重低音扬声器初始设定开关

此开关用于设定接通电源时重低音扬声器输出的打开与关闭。

②④ EXT REMOTE SENSOR INPUT jack 外部遥控器输入插孔

将外部遥控器的输入插孔连接至这些插孔。

②⑤ CENTER SPEAKER ON/OFF Switch 中置扬声器开关

使用中置扬声器时打开此开关，不使用中置扬声器时关闭。此开关处于 OFF 状态时，不能调节 MIC MIX 和 MUSIC 的音量。

②⑥ OUTPUT LEVEL (Attenuator) Switch 减音器开关

此开关可将输出强度设为 0.7V、1.0V 或 1.4V。默认设为 1.0V。

②⑦ SUB WOOFER L.P.F. Switch 重低音扬声器、低通滤波器开关

此开关用于将重低音扬声器输出的低通滤波器的截止频率设定为 60Hz、80Hz 或 100Hz。

②⑧ AUX MODE AUTO SELECTOR Switch KARAOKE / BGM / AUTO OFF 辅助模式自动选择开关 KARAOKE / BGM / AUTO OFF

使用 AUX，KARAOKE ↔ BGM 选择开关可用于选择自保持或非自保持状态。将这些开关设在 KARAOKE 位置为自保持状态；将这些开关设在 TAPE 位置为非自保持状态。

KARAOKE：即使输入 DVD 或 CD 信号，输入源选择器也不切换到 DVD 或 CD。

BGM：输入 DVD 或 CD 信号时，输入源选择器切换到 DVD 或 CD。

AUTO OFF：在此位置上，自动音频 / 视频切换功能不可用。

音频 / 视频切换由前面板上的 FUNCTION 开关进行切换。

默认设为 KARAOKE。

②9 **TAPE MODE AUTO SELECTOR Switch KARAOKE/**

**BGM 磁带模式自动选择开关 KARAOKE/BGM**

使用 TAPE, KARAOKE ↔ BGM 选择开关用来选择自保持或非自保持状态。将这些开关设在 KARAOKE 位置为自保持状态；将这些开关设在 TAPE 位置为非自保持状态。

KARAOKE: 即使输入 DVD 或 CD 信号, 输入源选择器也不切换到 DVD 或 CD。

BGM: 输入 DVD 或 CD 信号时, 输入源选择器切换到 DVD 或 CD。

默认设为 KARAOKE。

③0 **VIDEO output jacks 视频输入插孔**

将此输出插孔连接至显示器视频输入端。

③1 **AUX AUTO SELECTOR Switch 卡拉 OK 自动选择开关**

此开关是选择由自动音像转换功能检测到的信号类型, 以转换输入功能。

AUDIO: 根据音频信号转换。

A&V: 根据音频或视频信号转换。

VIDEO: 根据视频信号转换默认设为 A&V。

③2 **CD AUTO SELECTOR Switch CD 自动选择开关**

此开关将选择由自动音像转换功能检测到的信号类型, 以转换输入功能。

AUDIO: 根据音频信号转换。

A&V: 根据音频或视频信号转换。

VIDEO: 根据视频信号转换。

默认设为 A&V。

③3 **DVD AUTO SELECTOR Switch DVD 自动选择开关**

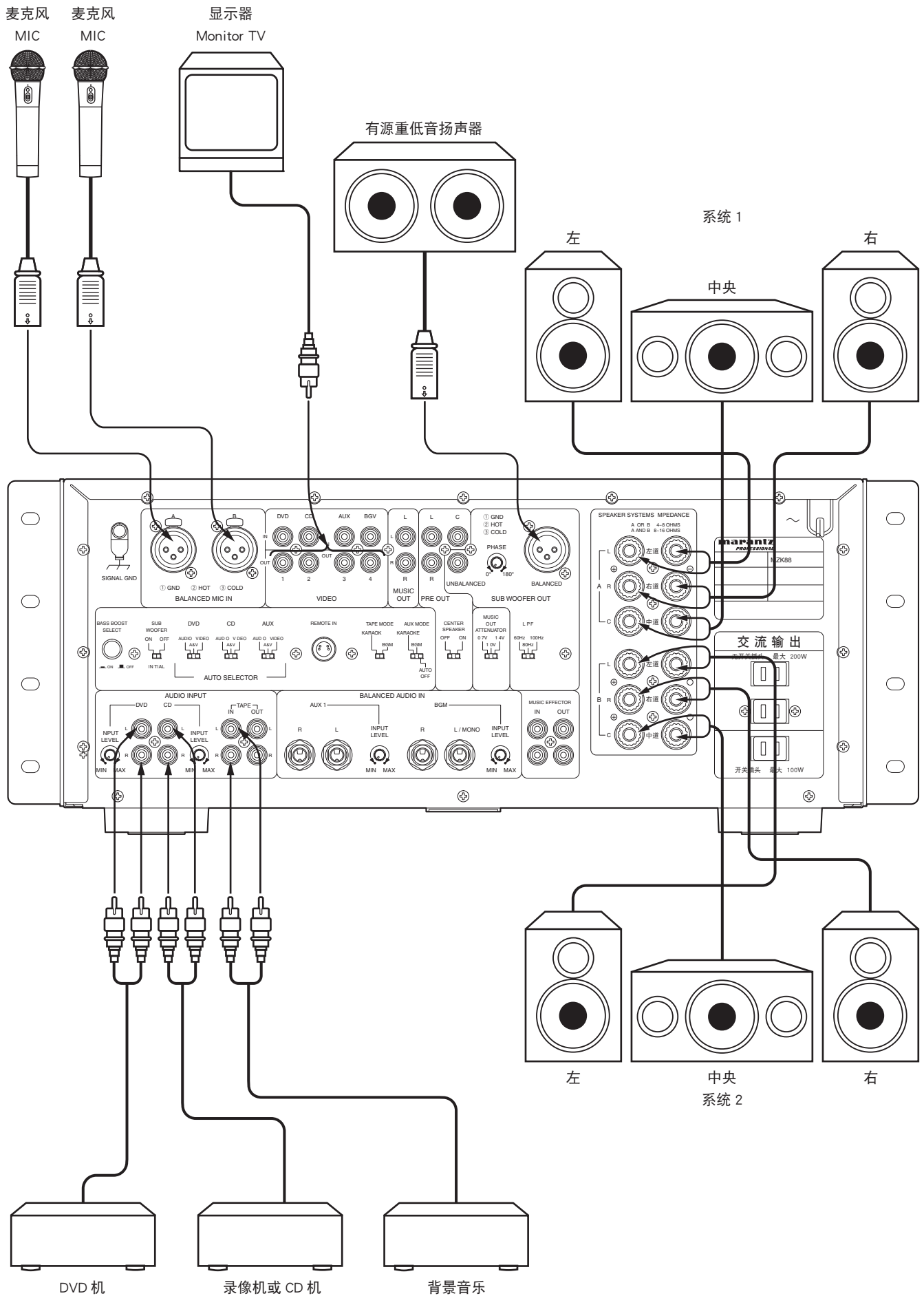
此开关是选择由自动音像转换功能检测到的信号类型, 以转换输入功能。

AUDIO: 根据音频信号转换。

A&V: 根据音频或视频信号转换。

VIDEO: 根据视频信号转换默认设为 A&V。

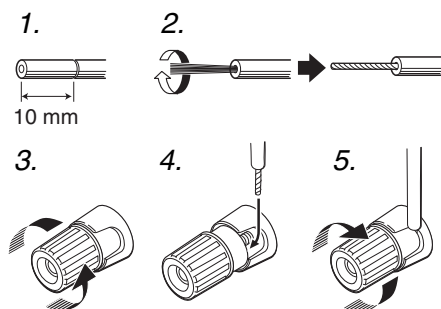
# 系统的连接



# 连接方法

## 扬声器导线的连接

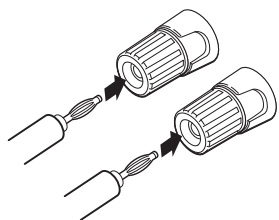
1. 剥掉约 10mm 的导线绝缘层。
2. 为了避免发生短路，将裸露的导线端拧在一起。
3. 逆时针方向转动松开旋钮。
4. 将导线的裸露部分分别插入插孔。
5. 顺时针方向转动拧紧旋钮，使导线能被牢靠地安装。



## 香蕉插头的连接

也可连接香蕉插头。

顺时针方向转动拧紧旋钮，然后插入香蕉插头。



### 警告：

- 请务必使用本产品后面板上所标示的指定阻抗的扬声器。
- 为了避免损坏电路，请不要让裸露的扬声器导线相互接触，并且使其不接触本产品的金属部分。
- 电源打开时，请不要接触扬声器插孔，可能导致触电。
- 请不要在一个扬声器插孔上连接两根以上扬声器导线。否则可能使本产品发生故障。

注意：勿使从接线端伸出的导线未被覆部份与其他导线的同等部位相接触，以免损坏功放机。

可以与其连接的扬声器系统的阻抗。

一个系统所使用的扬声器。(1 或 2)

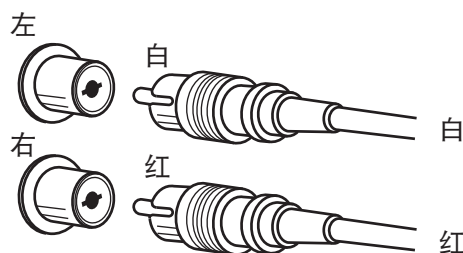
..... 4 Ω 到 16 Ω

二个系统所使用的扬声器。(1 和 2)

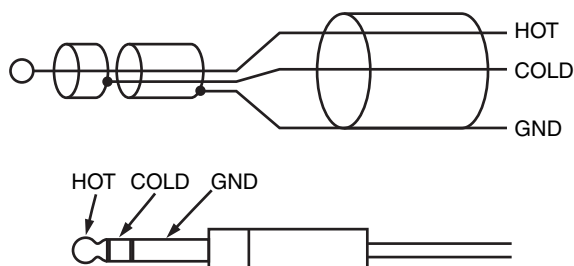
..... 8 Ω 到 16 Ω

## 连接 RCA 插头

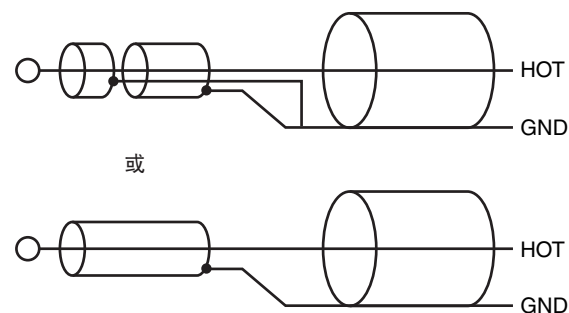
在连接 RCA 插头时，必须注意将红色插头插入红色插孔而将白色插头插入白色插孔。



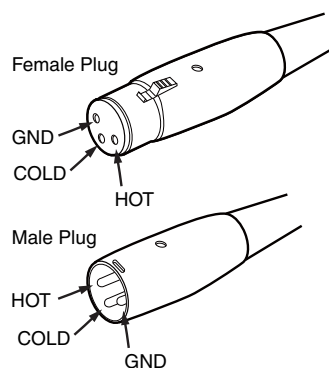
## 连接至平衡输入端



## 连接至非平衡输入端



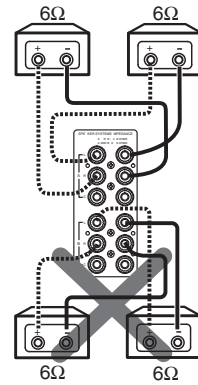
## 连接 XLR 插口



## 扬声器连接的重要注意事项

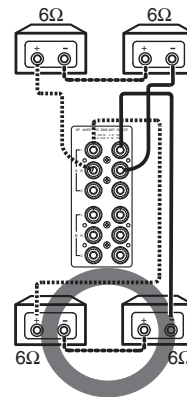
1. MZK88 的最大输出为 200 W+200 W+200 W。因此，需要最大输出为 200 W 或 200 W 以上的扬声器。
2. MZK88 的最小扬声器阻抗的设计值为 4 Ω。如果两个 6 Ω 的扬声器系统并联，其阻抗将超过设计值，因此保护装置将起作用。当使用两个扬声器系统且保护装置频繁起作用时，此时您应该将扬声器系统串联。
3. 使用 marantz 原装扬声器可以防止因误匹配而引起的任何问题或损坏。

- ① 并联  
(每个扬声器的阻抗应为 8 Ω 或 8 Ω 以上)



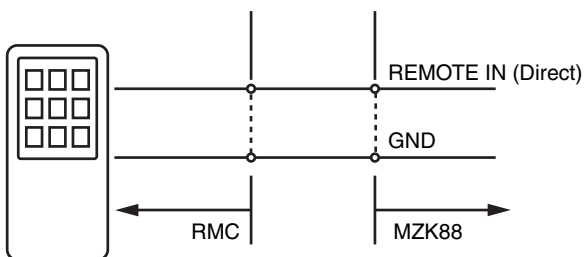
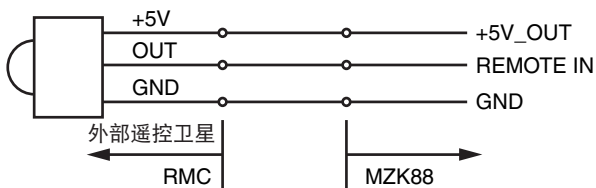
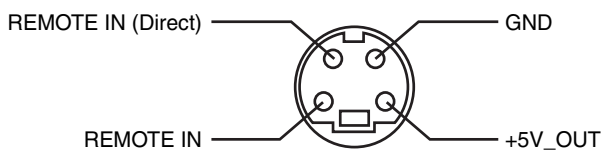
$6\Omega + 6\Omega \rightarrow 3\Omega$   
(NG :  $< 4\Omega$ )

- ② 串联  
(总共：超过 4 Ω，可用)



$6\Omega + 6\Omega = 12\Omega$   
(OK :  $> 4\Omega$ )

## 出口远程输入



### 1) 外部遥控卫星

- 连接至 +5V, REMOTE IN 和 GND。

注意)

仅当在此输入端连接遥控卫星时，MZK88 才可接收遥控卫星信号。

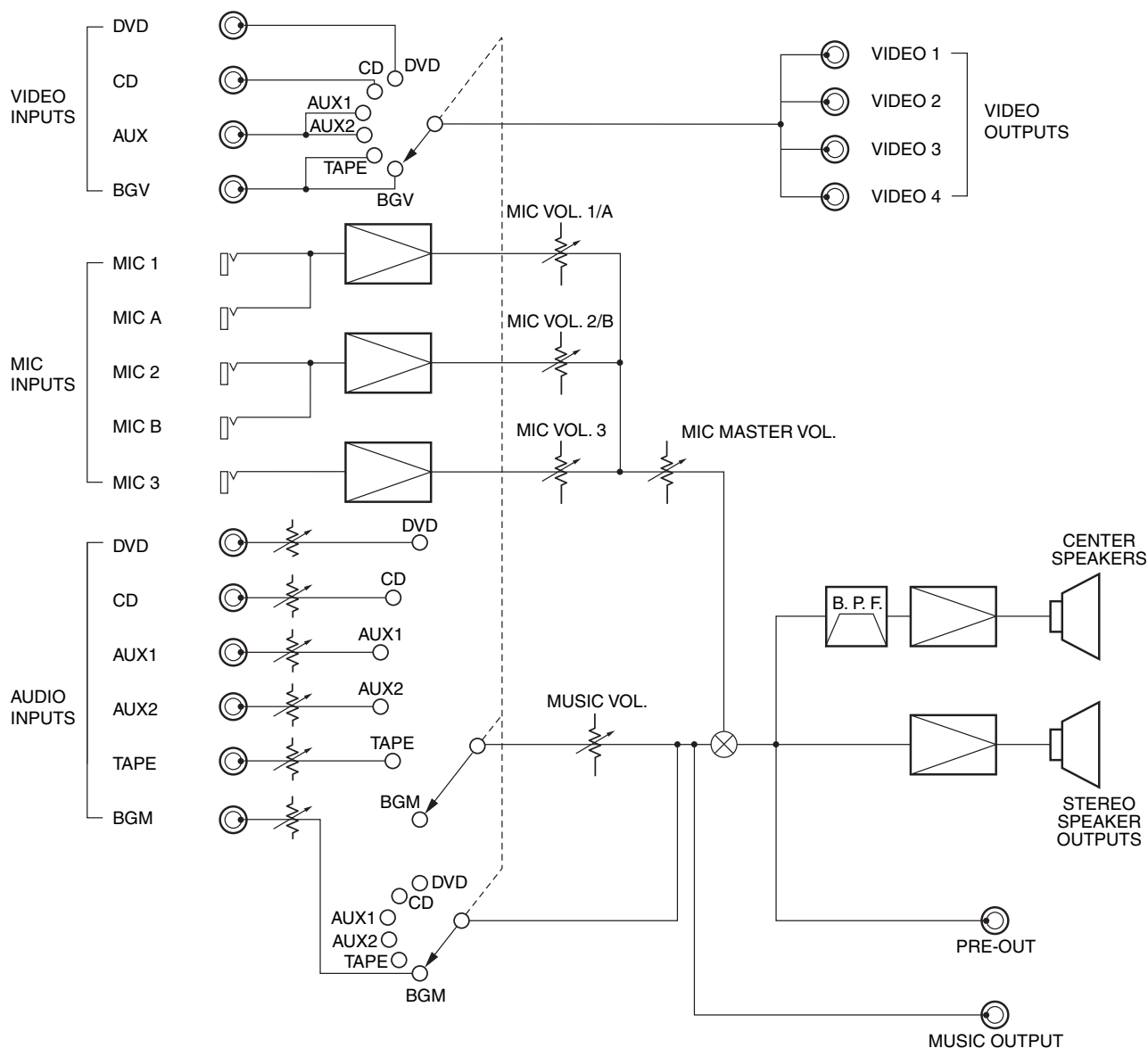
### 2) 远程输入端 (直连)

- 连接至 REMOTE IN (直连) 和 GND。  
· 连接至 RMC 红外线二极管输出端 (开集极)。

注意)

仅当在此输入端连接遥控卫星时，MZK88 才可接收遥控卫星信号。

# 音像转换原理



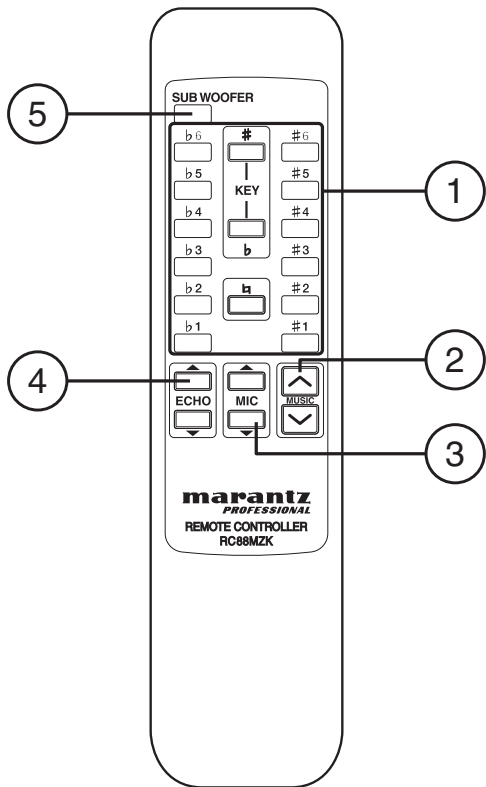
## 自动音像选择

- 本功放机能检测音频和（或）视频信号，并以 1) DVD、2) CD、3) AUX、4) TAPE、5) BGM 的优先顺序自动转换输入功能。
- 为了转换至 KARAOKE、DVD 和 AUX，本功放机能够对导致输入功能转换的各类信号（音频、视频、音频和视频）作出选择。  
AUDIO：根据音频信号转换。  
A & V：根据音频或视频信号转换。  
VIDEO：根据视频信号转换。

- 使用 AUX 和 TAPE，KARAOKE ↔ BGM 选择开关可用来选择自保持或非自保持状态。将这些开关设在 KARAOKE 位置为自保持状态；将这些开关设在 BGM 位置为非自保持状态。  
KARAOKE：即使输入 DVD 或 CD 信号，AUX 功能也不转换到 DVD 或 CD。  
BGM：输入 DVD 或 CD 信号时，AUX 功能转换到 DVD 或 CD。

# 遥控功能

## 部件名称及其功能



### ① 主调变换按钮

- 上升 (#1 至 #6)  
主调能够以 6 档、每档半个音调从标准主调上升 2.5 个音调;
- 标准 (b)
- 下降 (b 1 至 b 6)  
主调能够以 6 档、每档半个音调从标准主调下降 2.5 个音调;  
(一曲结束后, 音调自动回复至标准主调)

### ② 音乐音量控制按钮

- 按其中一个按钮以提高或降低音乐音量。在调节过程中, 本体上的音乐音量控制装置的发光二极管会闪烁。间歇地按下按钮才能得到良好的微调节。

### ③ 麦克风主音量控制按钮

- 按其中一个按钮以提高或降低麦克风的整体音量。在调节过程中, 本体上的麦克风主音量控制装置的发光二极管会闪烁。间歇地按下按钮才能得到良好的微调节。

### ④ 主回音强度控制按钮

- 按其中一个按钮以提高或降低回音量。

### ⑤ 重低音扬声器开关

- 按此开关切换重低音扬声器输出的开与关。

## 遥控器的操作

### 1. 无线遥控装置

无线遥控器与放大器上的传感器之间的距离不能超过 5m。注意, 如果遥控器没有对准传感器或在两者之间存在障碍时, 遥控器将不起作用。

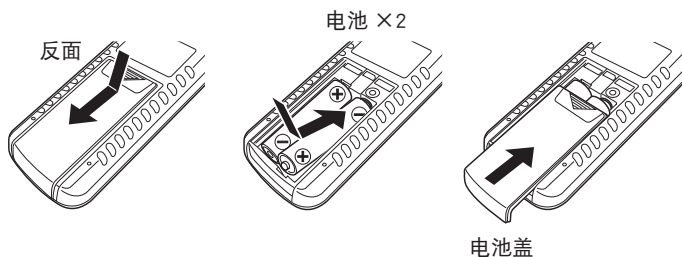
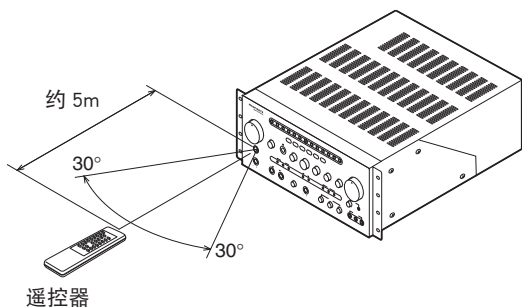
### 2. 安装电池

在正常使用情况下遥控器中的电池寿命约为半年。如果长期不使用遥控器时, 请取出电池。当电池的电力变弱时, 请尽早更换。

不正当地使用电池可能导致漏电和电池破裂。

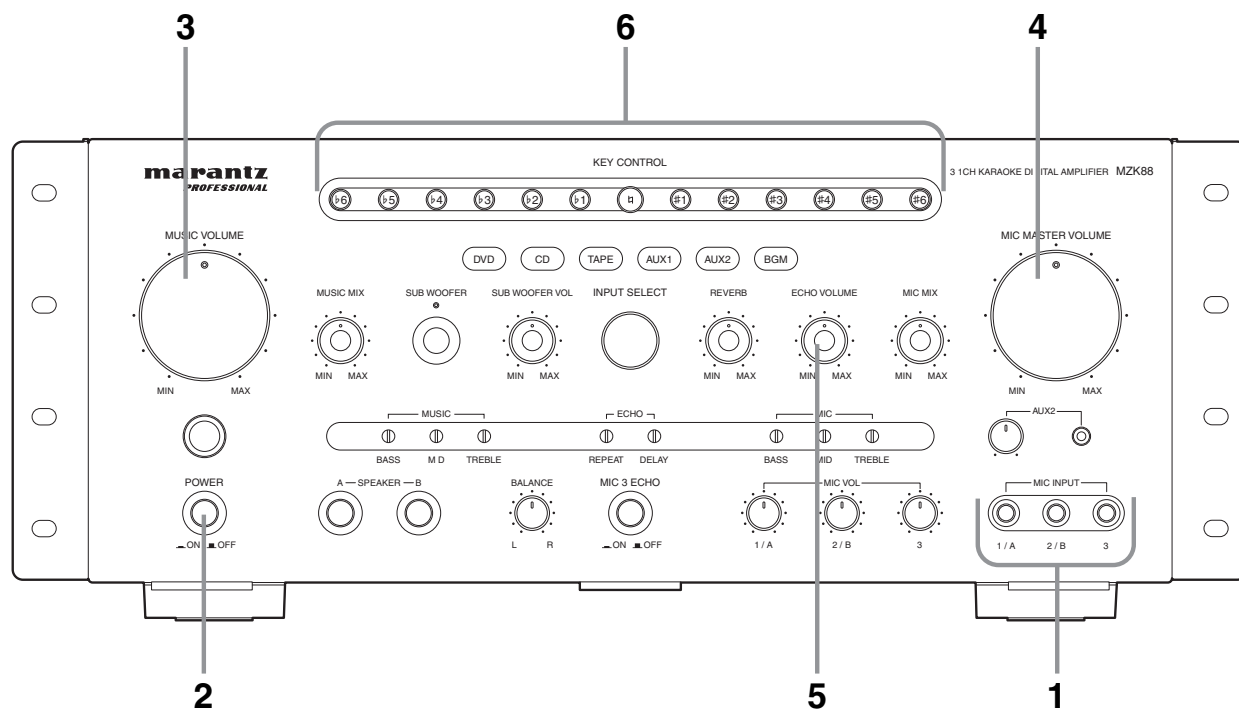
注意下列事项:

- (1) 装入电池时注意电池的正极 (+) 和负极 (-) 的方向与电池槽内所指示的一致;
- (2) 不要将新旧电池混用;
- (3) 即使是用同样外型的电池, 由于型号不同, 电池的电压有所不同。注意不要将不同型号的电池混用;
- (4) 勿将已使用过的电池作为可燃垃圾处理。





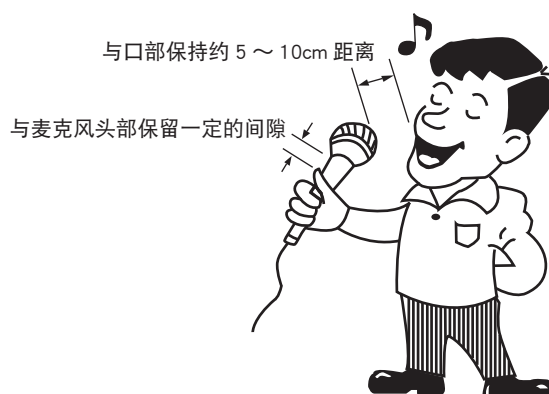
# 一般操作



- 1 连接所需的麦克风。
- 2 接通放大器及其他组件的电源。
- 3 再生卡拉 OK 音乐源组件，并用音乐音量控制装置调节音量。
- 4 用麦克风音量控制装置和麦克风主音量控制装置调节各麦克风音量之间的平衡以及麦克风整体音量与音量之间的平衡。
- 5 用主回音音量控制装置调节回音强度。
- 6 用数字式主调控制器按钮设定所需的音调。

## 正确使用麦克风的注意事项

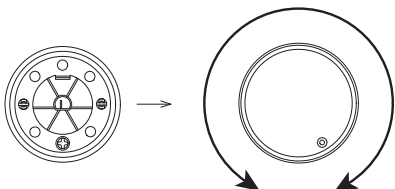
- 使用麦克风时必须使麦克风与口部之间保持 5 ~ 10cm 的距离。
- 为保证声音清晰，所握的地方要与麦克风头部留有一定的间隙。
- 不要阻碍风挡的底部，这会妨碍正确的声音再生，使低音不清晰，并且容易产生啸声。



## 要将音量旋钮停在所需位置

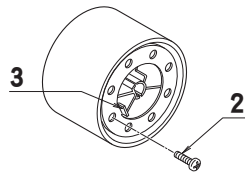
顺时针转动音乐旋钮或麦克风旋钮，购机时这些旋钮停在“10”处。这一设置可以按如下所述改动：

- 1 从 MZK88 上拆下音量旋钮。
- 2 拧下音量旋钮上的螺丝。  
购机时，停止器设置如下：



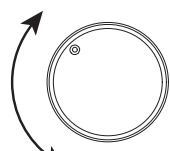
音量旋钮可以从 0 转到 10。

- 3 从音量旋钮上拆下停止器，然后按下图进行设置。
- 4 拧紧螺丝，然后将旋钮装回到 MZK88 上。

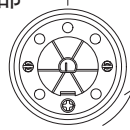


### 设置示例

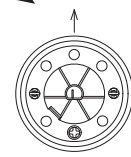
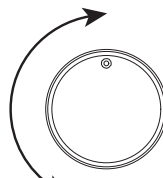
前面板侧



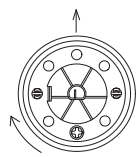
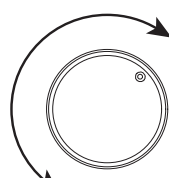
内部



停止位置设在 4。



停止位置设在 6 和 7 之间。



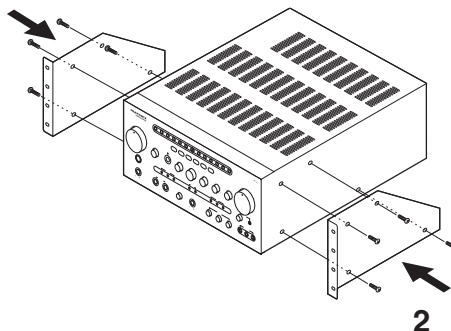
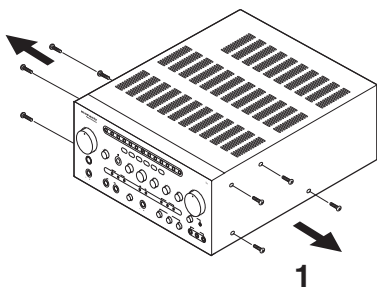
停止位置设在 7。

## 行李架设置用支架的安装

- 1 拆下两侧的螺丝。
- 2 用拆下的螺丝安装附带的支架。

### 警告

不能使用 MZK88 两侧面以外的螺丝安装支架。  
如使用其他螺丝，可能导致 MZK88 坠落或对内部造成损坏。



## 保养注意事项

当本体表面有污秽时，请用干的软布擦拭干净。在极为污秽的情况下，用软布沾上稀释了 5.6 倍的洗涤剂后拧干，除去污秽后再用干布擦拭。切勿使用酒精、稀释剂、苯、杀虫剂或是其他挥发性溶剂，因为这会

有损本体表面涂层或失去光泽。也勿用含有化学药品的布料擦拭本体或长时间遗放在本体上，这会使表面处理品质下降或涂层剥落。

# 故障的排除

很多场合，由于操作失误引起功放机出错。按照下列检查方法，用户可以轻而易举地纠正许多错误。

症状	原因	措施
扬声器无音响输出	1. 电源处于关闭状态； 2. 电源线脱落； 3. 音乐音量控制装置设定在最小值。	1. 打开电源； 2. 将电源线稳固地插入电源插座； 3. 调节音乐音量控制装置；
其中一个扬声器无音响	1. BALANCE 控制装置完全偏于一个极端位置； 2. 未连接某一扬声器导线；	1. 将控制装置设定于中间位置； 2. 将导线稳固地插入接线端；
麦克风无音响输出	1. 麦克风插头未被完全插入插孔； 2. 麦克风开关处于关闭状态； 3. 相对应的麦克风音量控制装置或麦克风主音量控制装置处于最小值状态； 4. 麦克风离口部太远或是麦克风的握持方法不正确；	1. 将插头稳固地插入插孔； 2. 打开麦克风开关； 3. 调节控制装置； 4. 参照有关麦克风的使用说明；

# 售后服务

- ① 如果发现本机有毛病，当地的经销商会按您的要求收费修理或更换有毛病的零件。
- ② 在要求当地的经销商进行修理之前，请先参阅“故障的排除”一节，并再次检查。

### 致经销商：

如果您的客户要求您为他进行售后服务，请先检查以下内容。

- 确认故障的细节。
- 检查所有的电缆和连接。
- 为客户讲解使用本系统的操作注意事项和使用说明。

如果发现本机有毛病，且不能修理，请将有毛病的机器送到最近的 marantz 授权服务中心。

# 使用礼仪



用户所喜爱的卡拉 OK 娱乐活动也许正在打扰别人。进行卡拉 OK 时，也请考虑到周围的近邻。卡拉 OK 的音量是由用户决定的，记住即使是很小的声音在宁静的夜晚也能传得很远，在夜间进行卡拉 OK 时请特别留意。建议用户关上窗户以免声音外漏至近邻，并且要为他人的舒适生活环境着想。

# 版权

· 广播、音源（如录制的音乐磁带）、DVD、录像带、CD 等受版权法严格保护。

· 这些资源除用于自己欣赏外，为商业用途而使用、经销、租借这些音源，或将复制的媒体销售给他人，都需要有版权拥有者的许可。

# 技术规格

## 功放机

最大输出 (1kHz, 8Ω, 10% THD)  
..... 200W+200W+200W

最大输出 (1kHz, 4Ω, 10% THD)  
..... 280W+280W+280W

总谐波失真..... 0.1%  
(1kHz, 50W, 8Ω)

## 音频输入插孔 (灵敏度 / 阻抗)

DVD、CD、TAPE、AUX1、AUX2.... 150 mV/25 KΩ

BGM ..... 450 mV/25 KΩ

MIC..... 4.3 mV/5 KΩ

## 音频输出插孔 (输出强度 / 输出阻抗)

PRE ..... 800 mV/1 KΩ

EFFECTOR ..... 180 mV/1 KΩ

SUBWOOFER..... 1 V/1 KΩ

## 频率响应

MUSIC ..... 20 Hz to 15 kHz, +4/-2 dB

MIC..... 40 Hz to 15 kHz, +3/-3 dB

## 音质控制特性

MUSIC BASS..... +13/-10 dB (100 Hz)

MID ..... ±12 dB (1 kHz)

TREBLE..... +12/-10 dB (10 kHz)

MIC BASS..... ±13 dB (100 Hz)

MID ..... ±13dB (1kHz)

TREBLE..... +12/-8 dB (10 kHz)

扬声器阻抗..... 4 Ω 到 16 Ω  
(一个系统所使用 1 或 2)  
8 Ω 到 16 Ω  
(二个系统所使用 1 和 2)

音调控制范围..... 13 步, ±3 个音调

## 视频输入插孔

(灵敏度 / 输入阻抗)..... 1Vp-p/75 Ω

## 视频输出插孔

(灵敏度 / 输出阻抗)..... 1Vp-p/75 Ω

## 电源

### 电源电压

中国版本 ..... AC 220V 50Hz

新加坡马 / 来西亚版本..... AC 230V 50Hz/60Hz

功率消耗..... 750 W  
(待机)..... 42 W

交流输出  
无开关插头 (最大 200 W)..... 2  
开关插头 (最大 100 W)..... 1

尺寸 (宽 × 高 × 深)  
..... 490 mm × 177.6 mm × 441 mm

重量 ..... 17 Kg

## 附属品

使用说明书..... 1

无线遥控器 (RC88MZK)..... 1

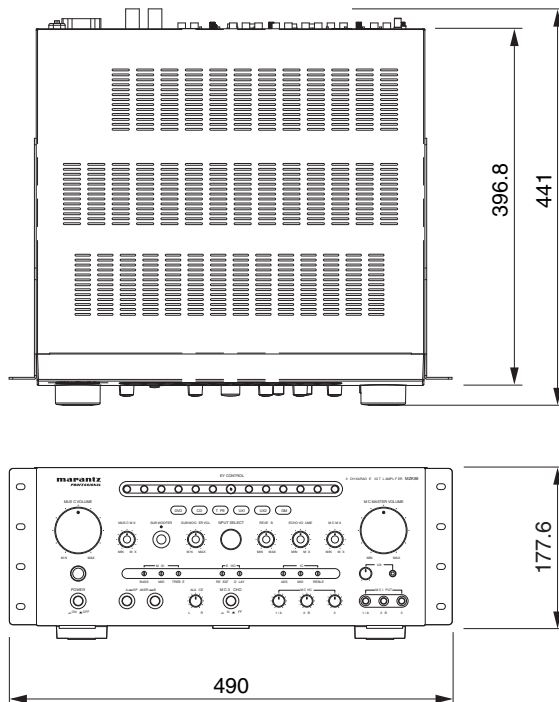
电池 (AAA)..... 2指

行李架设置用支架..... 2

针标签..... 1

● 由于改进的关系，以上的规格和外观会不经予告而有所变更。

## 尺寸 (mm)



Thank you for your purchase of the **marantz** MZK88 Digital Echo AV Amplifier.  
 Before using the Digital Echo AV Amplifier, be sure to read this entire operating manual so that you can take full advantage of the MZK88's features.  
 After you finish reading, keep this document and the warranty handy in a safe place in case you need them in the future. The manual should be very helpful in understanding the microphone receiver and solving any difficulties that may arise during use.

# SPECIAL FEATURES

- Power output 200W + 200W + 200W (8 ohms 10% THD)
- 6 Line inputs Auto function in order of priority.
- Built-in high quality digital echo.
- 5 microphones simultaneously available.
- Built-in key controlled allows to be transposed the key of music over 3.0 tones, in  $\pm 6$  positions. (Automatically resets after use)
- Bass Boost Function
- Wireless remote controller (Control music level, Microphone level, Key controller, Subwoofer On/Off)

## Table of Contents

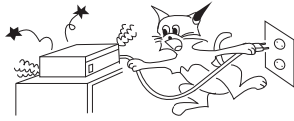
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# WARNING

- Do not expose the equipment to rain or moisture.
- Do not remove the cover from the equipment.
- Do not insert anything into the equipment through the ventilation holes.
- Do not handle the mains lead with wet hands.
- Do not cover the ventilation with any items such as tablecloths, newspapers, curtains, etc.
- No sources of naked flame, such as lit candles, should be placed on the equipment.
- When disposing of used batteries, please comply with governmental regulations or applicable public environmental rules for your country or region.
- Do not place anything closer than 0.1 meters above the top panel.
- Ensure a space of about 0.1 meters is left around the unit.
- No objects filled with liquid, such as vases, should be placed on the unit.
- When the switch is in the OFF position, the equipment is not completely disconnected from the MAINS.
- To completely disconnect this product from the mains, disconnect the plug from the wall socket outlet.
- The mains plug is used to completely interrupt the power supply to the unit and must be within easy access by the user.

## SAFETY PRECAUTIONS

### In case of abnormality.



In case any abnormal noise or smell is generated from the unit during use, immediately switch the power off, unplug the power cord from the power outlet, and consult your dealer or an authorized service center for a check-up.

### Do not open the unit.

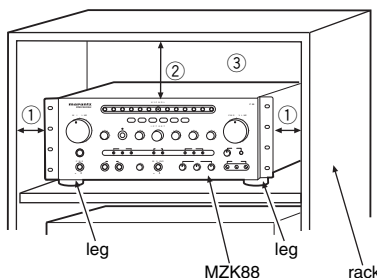


High-voltage components are used inside the unit. Do not open the cabinet to check or modify the unit, for this involves a risk of electric shock. Any deterioration in performance or malfunction caused by user modification will be excluded from the warranty.

### Do not exceed the maximum power capacity.



The components equipped with the rear panel AC OUTLETS accept connections from other stereo system components. However, do not connect components for which the total power consumption exceeds the power capacity marked on the rear panel, for this may cause malfunction or fire hazard. Also note that components through which a large current flows when the power is switched on, such as a TV set, cannot be connected to such an AC outlet unless it has been designed to accept TV connections.



The following rack size measurements must be adhered to:

- ① Between the R/L side of MZK88 and R/L sides of the rack; more than 5 cm
- ② Between the upper side of MZK88 and the rack; more than 20 cm
- ③ The rear of the rack must be opened.

※ Do not remove the legs.

### Keep away from water and foreign objects.



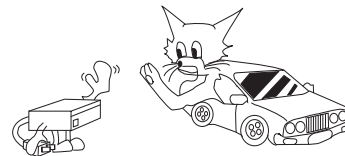
Do not insert or drop metallic objects, such as hairpins, nails and coins, or flammable objects, such as paper and matches, through the ventilation holes or other openings on the unit, for this will cause a malfunction or fire hazard and electric shock. In case water or a foreign object enters the unit, consult an authorized service center or your dealer for a check-up.

### Do not damage the power cord.



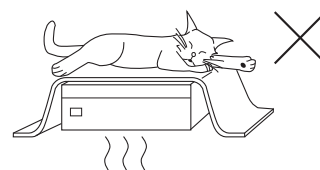
Hold the power plug when plugging or unplugging the power cord. Do not pull the cord or touch it with wet hands, for this may cause a short circuit or electrical hazard. Do not leave the power cord under this unit, or under furniture, or between objects. Also, never tie the power cord with another cord, knot it, or leave it in a place exposed to high human traffic.

### When the unit is unused for extended periods...



When leaving home for an extended period, for example when going on a trip, set the power switch to off and unplug the power plug from the power outlet for safety. This will prevent fire hazard due to unexpected accidents with the unit.

### Appliance with ventilation openings



These openings must not be blocked or covered. If this is done accidentally, the internal temperature will rise, and cause a fire. There are ventilation openings on the upper and lower sections of the casing to prevent overheating.

# HANDLING PRECAUTIONS

---

## Do not install the unit in the following locations:

- In places exposed to direct sunlight or near heat sources, such as a radiator.
- In places where the heat cannot escape due to poor ventilation, or which are very humid or dusty.
- In unstable places, with sloping surfaces or exposed to excessive vibration.
- In places which may be exposed to rain, such as near a window.
- In places which may be exposed to soot, vapor or heat, such as near cooking facilities.

## Precaution to fix in the rack:

- Keep the space 1U or more from the up or bottom side of this unit to avoid the heat from this unit

# BEFORE CONNECTING

---

## Connection precautions

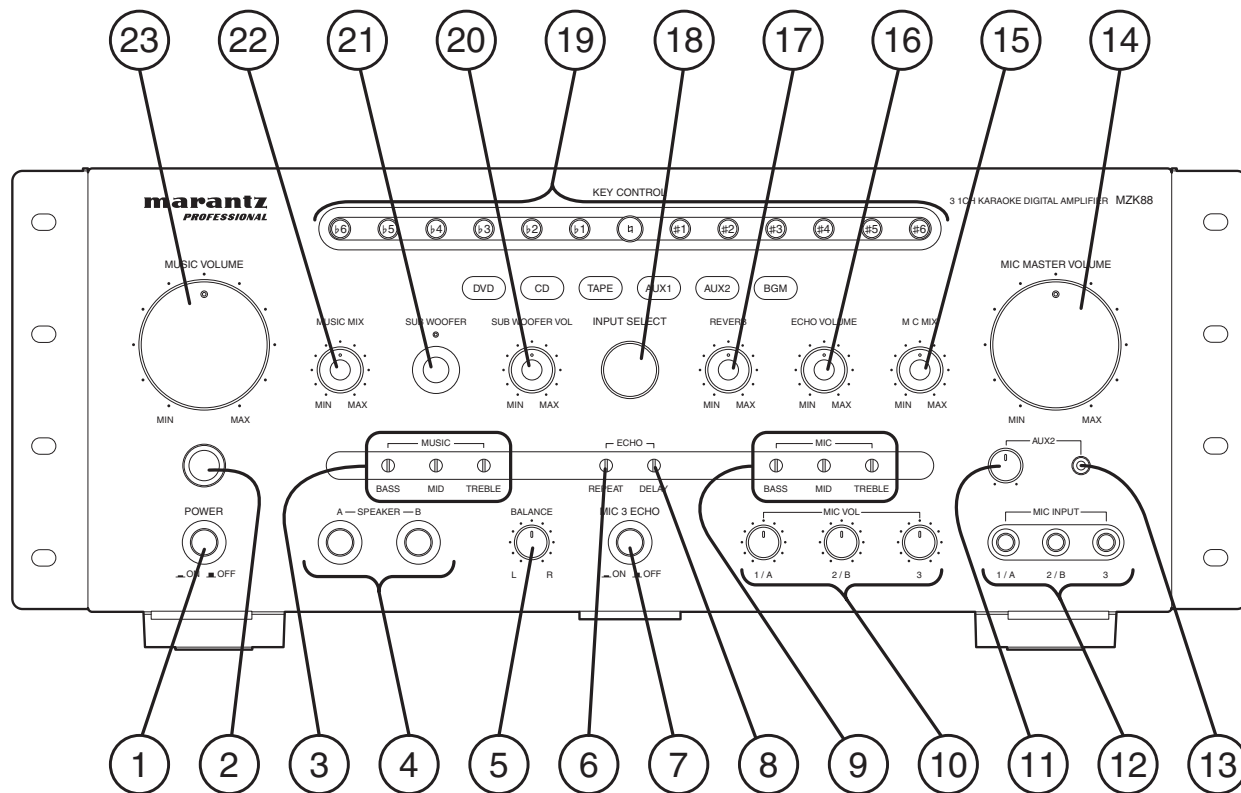
- Be sure to switch off the power of the relevant equipment before making any connection.
- The “White” input/output Jacks of the amplifier are designed for the Left channel, while the “red” input/output jacks are for the Right channels. Be sure to connect the cords without mistaking the color codes for the left and right channels.
- Insert the plugs of the connection cords securely into the jacks. If the connection is incomplete, there may be no sound produced or noise may be generated.
- When unplugging the power cord from the outlet, be sure to hold the plastic molding of the plug itself and pull.

## Power consumption of AC power outlets

- Be careful that the total power consumption does not exceed the wattage marked on the rear panel. Do not connect appliances other than system components to the power outlets of this unit.
- Do not connect a TV set to this unit; even if it indicates a power consumption value below the permissible value when the TV power is turned on.

# NAMES OF PARTS AND THEIR FUNCTIONS

[ FRONT PANEL SIDE ]

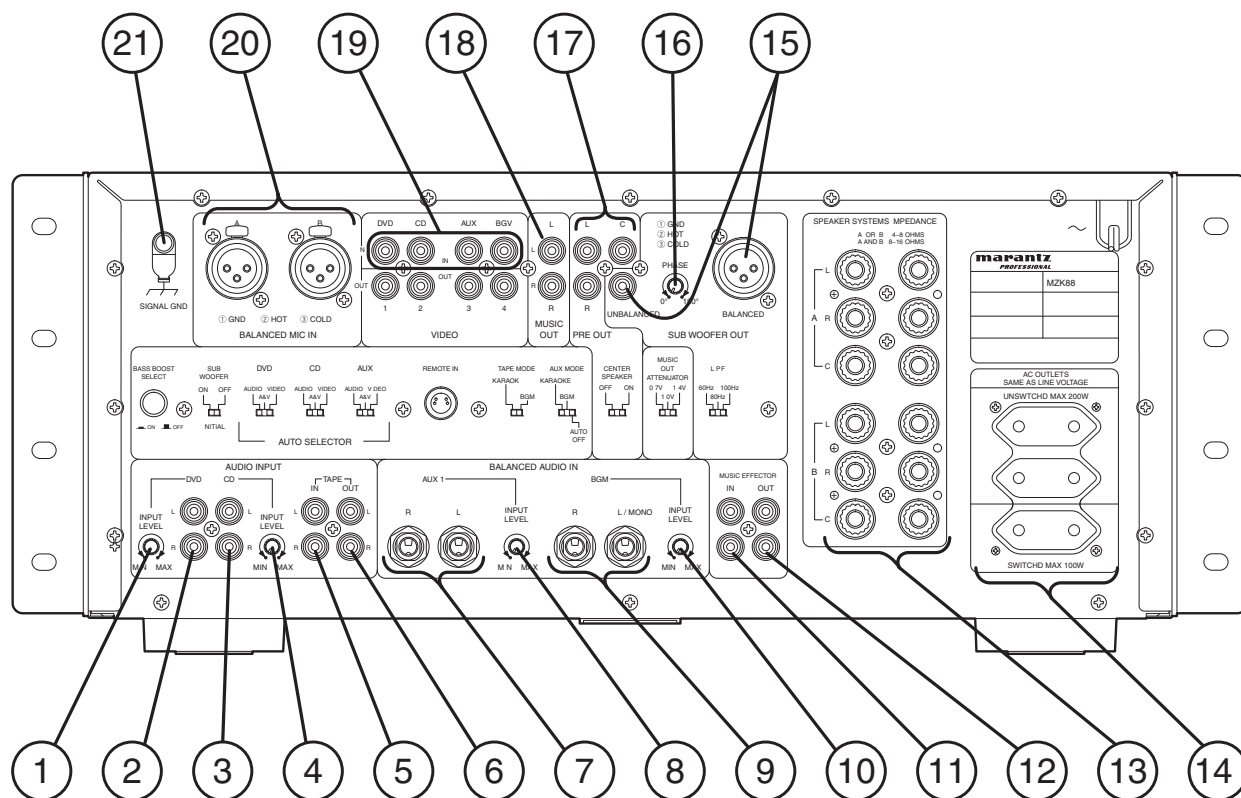


- ① **POWER Switch (ON ■ / OFF ■)**  
Press this switch to turn the power ON, and again to turn the power OFF.
- ② **REMOTE SENSOR**  
This is the IR sensor, which receives signals from the wireless remote control unit supplied (RC88MZK).
- ③ **MUSIC TONE Controls (BASS/ MID/ TREBLE)**  
These controls are used to boost or reduce the (low, middle, or high) frequency response.
- ④ **SPEAKER A, B Select Switch**  
This switch selects the speaker A and/or B which are connected speaker terminals to emit the audio.
- ⑤ **BALANCE Control**  
With this control you can adjust the volume balance between the left and right channels.
- ⑥ **ECHO REPEAT**  
Adjust the interval of repetitions with this control.
- ⑦ **MIC 3 ECHO ON/OFF Switch**  
Press this switch to turn the MIC 3 ECHO ON, and again to turn it OFF.
- ⑧ **ECHO DELAY**  
Adjust the delay time with this control.
- ⑨ **MIC TONE Controls (BASS/ MID/ TREBLE)**  
These controls are used to boost or reduce the (low, middle, or high) frequency response of microphones.
- ⑩ **MIC. VOL Controls (1/A, 2/B, 3)**  
These controls adjust the microphone input level from the MIC INPUT 1/ 2/ 3 jack (front panel) and MIC INPUT A/ B jack (rear panel).
- ⑪ **AUX2 input level control**  
Adjust this control to balance the AUX2 input level with respect to other input. (DVD, CD, TAPE, AUX1)



- 
- ⑫ **MIC. INPUT Jacks (1, 2, 3)**  
Those jacks are for connecting microphones.
- ⑬ **AUX2 audio input jack**  
Connect the output jacks of a TAPE Player, VCR etc. to these jacks.
- ⑭ **MIC MASTER VOL Control**  
This control adjusts the overall volume of all microphones.
- ⑮ **MIC MIX VOL Control**  
This control allows you to adjust the mixing volume of the microphone from the right and left speakers.
- ⑯ **ECHO VOL Control**  
This control affects the echo amount mixed into the microphone inputs to the MIC INPUT 1, 2 and 3 jacks and MIC INPUT A and B jacks.
- ⑰ **REVERB VOL Control**  
This control affects the reverb amount mixed into the microphone inputs to the MIC INPUT 1, 2 and 3 jacks and MIC INPUT A and B jacks.
- ⑱ **INPUT SELECT Switch**  
This display indicates the currently active function/s.  
This switch is available to change the input signal when AUX MODE AUTO SELECTOR switch is set AUTO OFF (rear panel).
- ⑲ **DIGITAL KEY Control Buttons**  
Press the required button to transpose the key of the music played. The key can be changed in halftone steps for six steps; either higher or lower.  
The key returns to the default level once the tune has finished.
- ⑳ **SUB WOOFER VOL Control**  
This control allows you to adjust the volume of the subwoofer.
- ㉑ **SUB WOOFER ON/OFF Switch**  
Press this switch to turn the subwoofer output on or off.  
The blue indicator is lit when the subwoofer is turned on.
- ㉒ **MUSIC MIX VOL Control**  
This control allows you to adjust the mixing volume of the music from the center speaker.
- ㉓ **MUSIC VOL Control**  
This control allows you to adjust the volume of the musical source.  
(The Volume of the BGM is controlled from BGM INPUT LEVEL control on the rear panel.)

[ REAR PANEL SIDE ]



- ① **DVD INPUT LEVEL Control**  
Adjust this control to balance the DVD input level with respect to other input. (CD, AUX, TAPE)
- ② **DVD AUDIO INPUT jacks**  
Connect the output jacks of DVD player to these jacks.
- ③ **CD AUDIO INPUT jacks**  
Connect the output jacks of KARAOKE Equipment to these jacks.
- ④ **CD INPUT LEVEL Control**  
Adjust this control to balance the CD input level with respect to other input. (DVD, AUX, TAPE)
- ⑤ **TAPE INPUT jacks**  
Connect the output jacks of a TAPE player, VCR etc. to these jacks.
- ⑥ **TAPE OUTPUT jacks**  
Connect the input jacks a TAPE player, VCR, etc. to these jacks.
- ⑦ **AUX 1 AUDIO INPUT jacks**  
Connect the output jacks of a TAPE player, VCR etc. to these jacks. These inputs are the balance inputs.  
Refer to connect on page 9.
- ⑧ **AUX 1 INPUT LEVEL Control**  
Adjust this control to balance the TAPE input level with respect to other inputs. (DVD, CD, TAPE)
- ⑨ **BGM AUDIO INPUT jacks**  
Connect the output jacks of the BGM function to these jacks.  
Use the L jack to input as the monaural source. These inputs are the balance inputs.  
Refer to connect on page 9.
- ⑩ **BGM INPUT LEVEL Control**  
Adjust this control to balance the BGM input level with respect to other inputs. (DVD, CD, AUX)

### ⑪ MUSIC EFFECTOR input jacks

Connect the output jacks of the music effector extension to these jacks. The connection of internal is automatically separated when inserting it.

### ⑫ MUSIC EFFECTOR output jacks

Connect the input jacks of the music effector extension to these jacks.

### ⑬ SPEAKER SYSTEM Terminals

Connect speaker systems with these jacks.

### ⑭ AC OUTLETS

Plug this cord into an AC wall outlet.

#### SWITCHED (max. total power consumption: 100 W)

Whenever the POWER switch on the unit's front panel is set to ON or OFF, the power to the components (whose power switch is set to ON) connected to the unit is also switched ON or OFF.

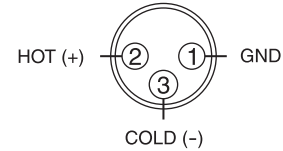
#### UNSWITCHED (max. total power consumption: 200 W)

Power is permanently supplied through these outlets, regardless of the POWER switch setting on the unit of the front panel. (In this case, the power of the connected component should be turned ON and OFF using the power switch on each component concerned.)

**Note:** Do not connect non system component units to these AC outlets. For instance, do not connect a TV monitor.

### ⑮ SUB WOOFER jack with low-pass filter

Connect the input jack of the subwoofer directly. This jack outputs the monaural signal through a low-pass filter.



### ⑯ SUB WOOFER PHASE Control

This control allows you to adjust the output of the subwoofer phase to set 0°– 180°. Set this switch to provide the fullest, most dynamic bass.

### ⑰ PRE output jacks

Connect the input jacks of the extension Power amplifier to these jacks.

### ⑱ MUSIC OUTPUT jacks

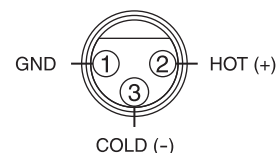
Connect the input jacks of the extension Power amplifier to these jacks. Only audio signal is output.

### ⑲ VIDEO input jacks

Connect this input jack with the video output of a DVD, CD, AUX, BGM player or video camera, etc.

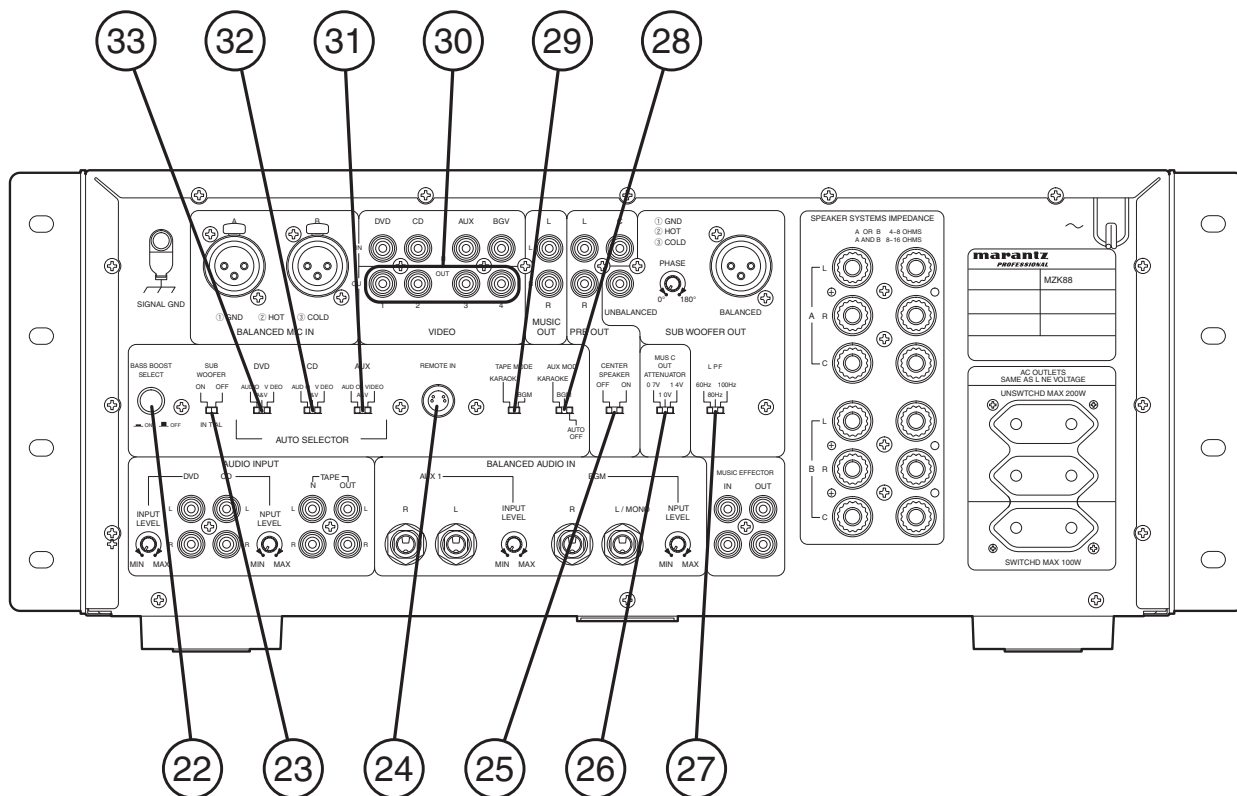
### ⑳ BALANCED MIC. INPUT jacks (A/B)

Those jacks are for connecting microphones. The A jack is connected to the same circuit as the MIC INPUT jacks 1 and 2, both on the front panel. These inputs are the balance inputs. Refer to connect on page 9.



### ㉑ SIGNAL GROUND Terminal

Connect this terminal if the humming noise is emitted by connecting this amplifier.



**22 MUSIC BASS BOOST Switch**

Press this switch to turn the BASS BOOST ON, and again to turn it OFF.

**23 SUB WOOFER Initial Switch**

This switch sets the subwoofer output on or off when the power is turned on.

**24 EXT. REMOTE SENSOR INPUT jack**

This Jack inputs the external remote control signal.

Refer to connect on page 9.

**25 CENTER SPEAKER ON/OFF Switch**

This switch is set on when the center speaker is used. This switch is set off when the no center speaker is used. When this switch is set OFF, the MIC MIX VOL and MUSIC MIX VOL controls are unavailable.

**26 OUTPUT LEVEL (Attenuator) Switch**

This switch can be set the output level at 0.7 V, 1.0 V or 1.4 V.

1.0 V is set at default.

**27 SUB WOOFER L. P. F. Switch**

This switch allows you to select the cut off frequency of the subwoofer low-pass filter to be set 60 Hz, 80 Hz or 100 Hz.

**28 AUX MODE AUTO SELECTOR Switch KARAOKE / BGM / AUTO OFF**

With AUX, KARAOKE ↔ BGM selector switches can be used to select self-holding or non self-holding status. The self-holding status is set by setting the switches to the KARAOKE position; the non self-holding status is set by setting the switches to the BGM position.

**KARAOKE** : The input source selector does not switch to DVD or CD even when a DVD or CD signal is input.

**BGM** : The input source selector switches to DVD or CD when a DVD or CD signal is input.

**AUTO OFF** : The automatic audio/video switching function is unavailable in this position.

The audio/video switching is switched by the FUNCTION switch on the front panel.

KARAOKE is set at default.

**②⑨ TAPE MODE AUTO SELECTOR Switch****KARAOKE/BGM**

With TAPE, KARAOKE ↔ BGM selector switches can be used to select self-holding or non self-holding status. The self-holding status is set by setting the switches to the KARAOKE position; the non self-holding status is set by setting the switches to the TAPE position.

**KARAOKE** : The input source selector does not switch to DVD or CD even when a DVD or CD signal is input.

**BGM** : The input source selector switches to DVD or CD when a DVD or CD signal is input.

KARAOKE is set at default.

**③⑩ VIDEO output jacks**

Connect this output jack with the video input of the monitor.

**③① AUX AUTO SELECTOR Switch**

This switch selects the types of signals detected by the automatic audio/video switching function to switch the input function.

**AUDIO** : Switching based on audio signal.

**A & V** : Switching based on either audio or video signals.

**VIDEO** : Switching based on video signal.

A & V is set at default.

**③② CD AUTO SELECTOR Switch**

This switch selects the types of signals detected by the automatic audio/video switching function to switch the input function.

**AUDIO** : Switching based on audio signal.

**A & V** : Switching based on either audio or video signals.

**VIDEO** : Switching based on video signal.

A & V is set at default.

**③③ DVD AUTO SELECTOR Switch**

This switch selects the types of signals detected by the automatic audio/video switching function to switch the input function.

**AUDIO** : Switching based on audio signal.

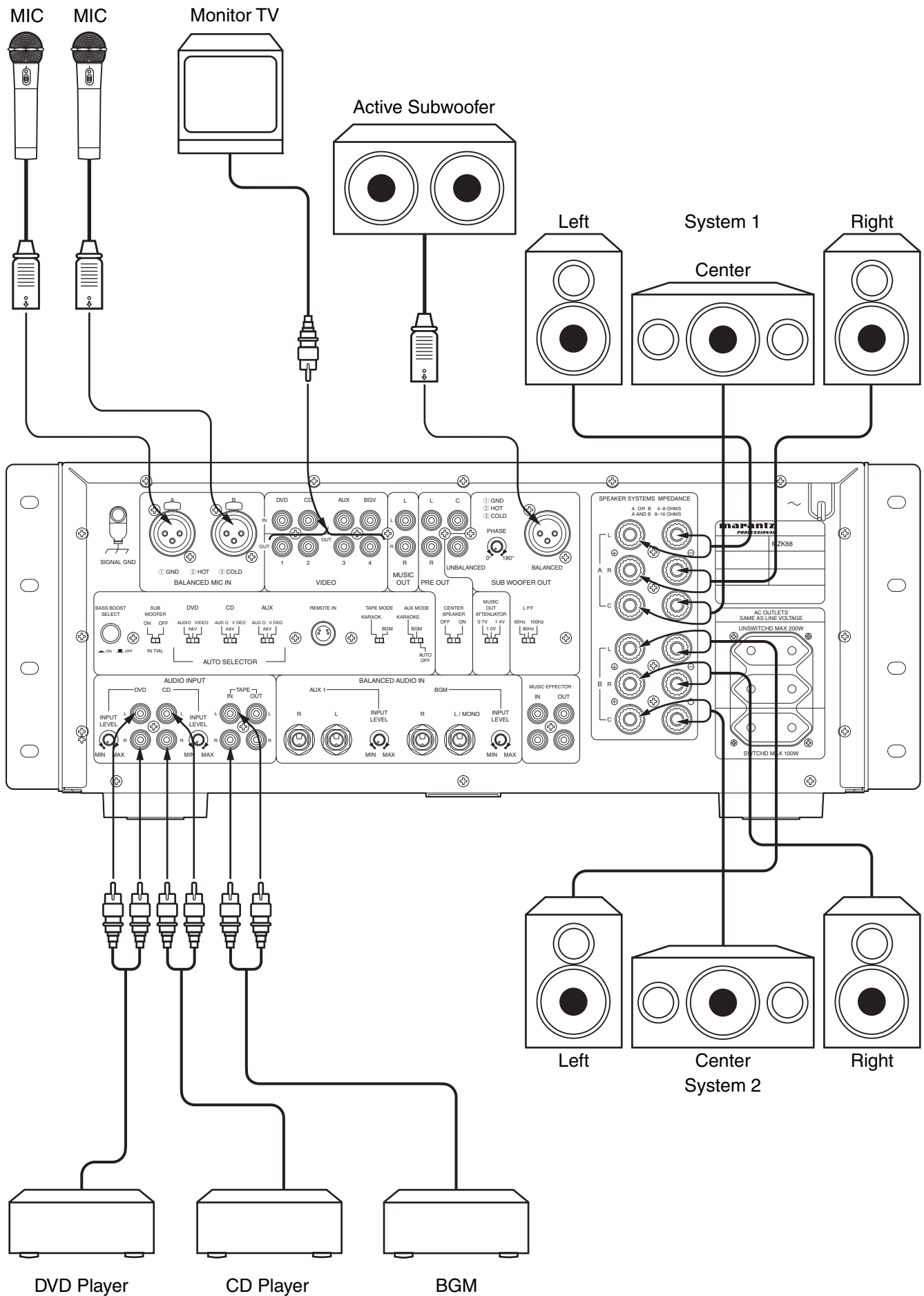
**A & V** : Switching based on either audio or video signals.

**VIDEO** : Switching based on video signal.

A & V is set at default.

# SYSTEM CONNECTIONS

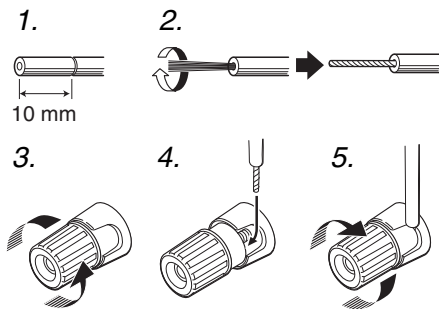
English



# CONNECTIONS

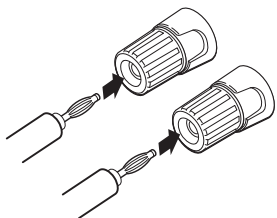
## Connecting Speaker Wire

1. Strip away approx. 10 mm of wire insulation.
2. Twist the bared wire ends tight to prevent short circuits.
3. Loosen the knob by turning counterclockwise.
4. Insert the bare part of the wire into the hole in the side of each terminal.
5. Tighten the knob by turning clockwise to secure the wire.



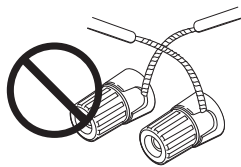
## Connecting Banana Plug

Banana plug connections are also possible. Tighten the knob by turning clockwise and then insert the banana plug.



### Caution:

- Be sure to use speakers with the specified impedance shown on the rear panel of this unit.
- To prevent damage to circuitry, do not let the bare speaker wires touch each other and do not let them touch any metal part of this unit.
- Do not touch the speaker terminals when the power is on. It may cause electric shocks.
- Do not connect more than one speaker cable to one speaker terminal. Doing so may damage this unit.



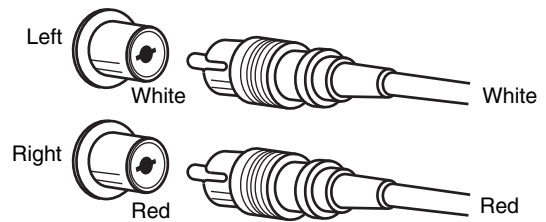
**Note:** Be sure to connect the positive and negative cables for the speaker properly. If they are miss-connected, the signal phase will be reversed and the signal quality will be corrupted.

Impedance of connectable speaker systems.

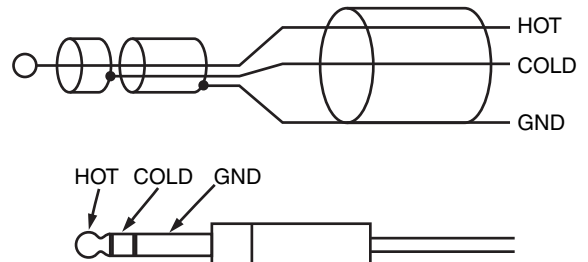
- The speaker system is used by one system. (1 or 2)  
 ..... 4 Ω to 16 Ω
- The speaker system is used by two systems. (1 and 2)  
 ..... 8 Ω to 16 Ω

## Connecting the RCA Pin Plugs

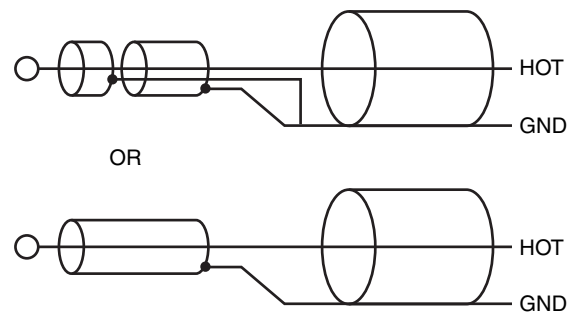
When connecting RCA pin plugs, be sure to insert the red plug into the red jack and the white plug into the white jack.



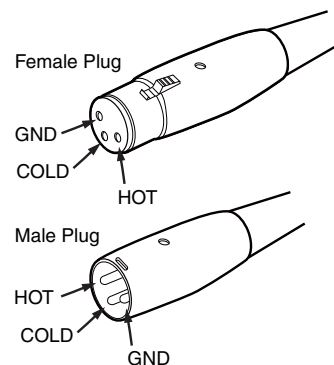
## Connect to the Balance Input



## Connect to the Unbalance Input



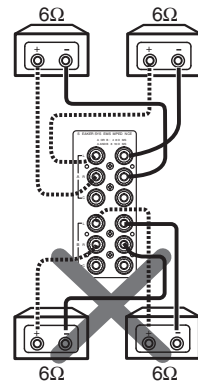
## Connect to the XLR Socket



**Important Precautions for Speaker Connection**

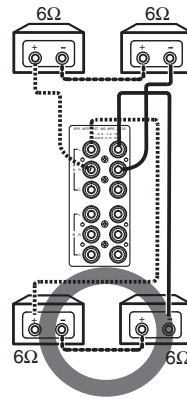
1. The maximum output of the MZK88 is 200 W + 200 W + 200 W. Therefore, the speakers used must have a maximum input of 200 W or more.
2. The minimum speaker impedance of MZK88 is designated at 4-ohm. If two 6-ohm speaker systems are connected in parallel, this will exceed the design value and trigger a safety protector device.  
When two speaker systems are used and the protector is frequently activated, the speaker systems should be connected serially instead.
3. Use marantz genuine speakers to prevent any trouble or damage caused by mismatching.

- ① Parallel connection  
(each speaker should be 8Ω or more)



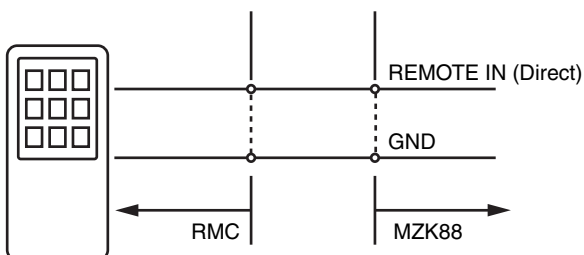
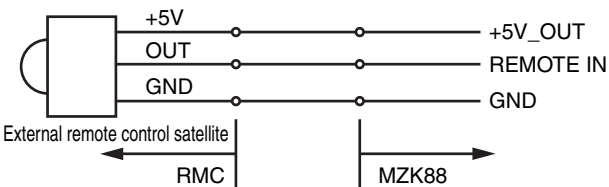
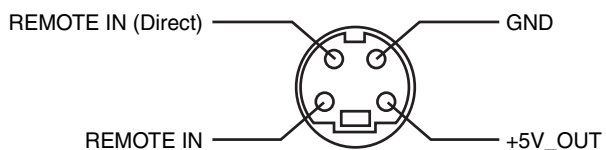
$6\Omega + 6\Omega \rightarrow 3\Omega$   
( $<4\Omega$  : NG)

- ② Series connection  
(total: over 4Ω is available)



$6\Omega + 6\Omega = 12\Omega$   
( $>4\Omega$  : OK)

**EXIT REMOTE INPUT**



**1) External remote control satellite**

- Connect to +5V, REMOTE IN and GND.

Note)

MZK88 can be received only a signal of the remote control satellite by connecting the remote control satellite on this input.

**2) Remote In (Direct)**

- Connect to REMOTE IN (Direct) and GND.

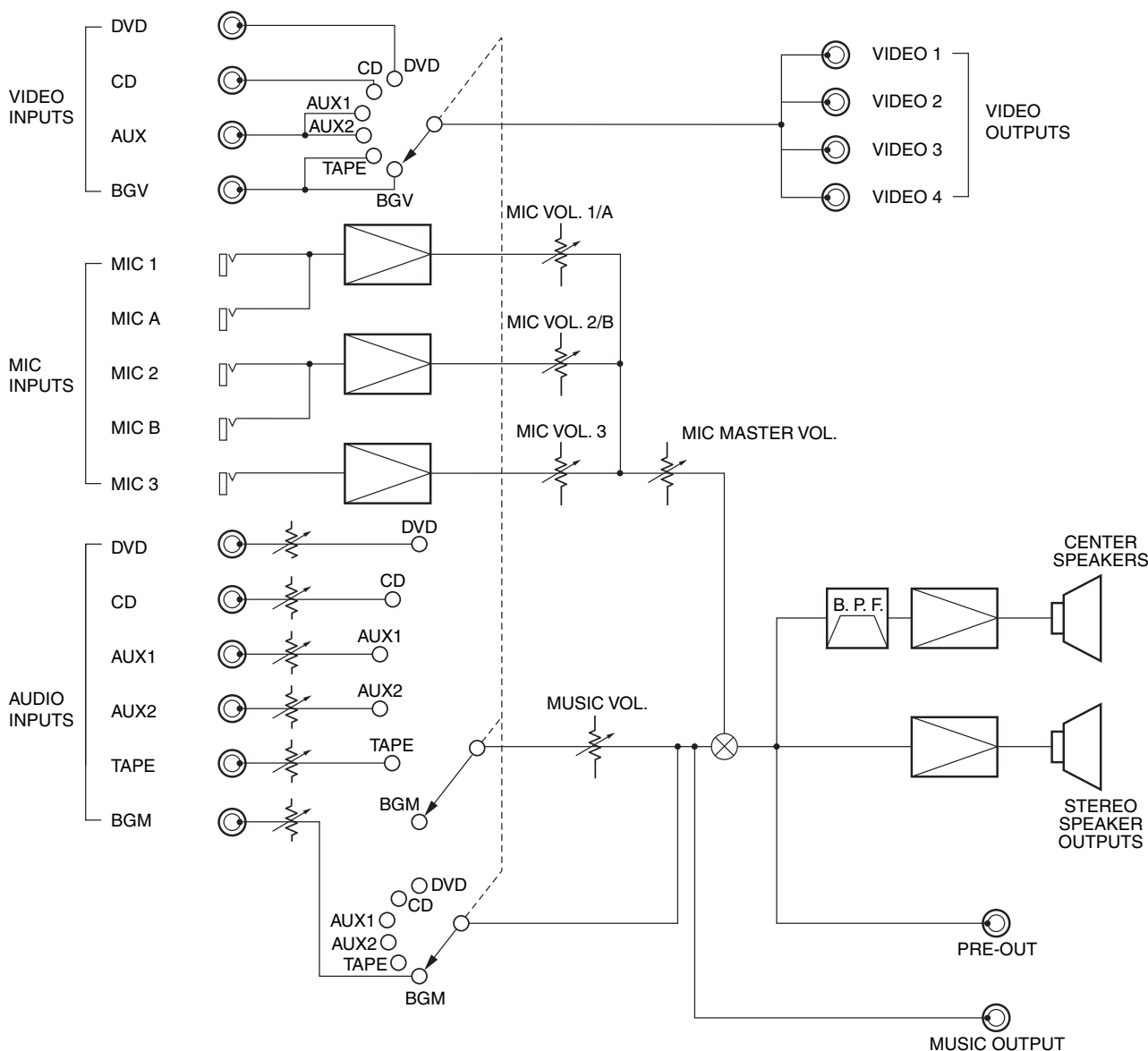
Connect to the infrared diode output (open collector) of RMC.

Note)

MZK88 can be received only a signal of the Remote In by connecting the Remote In (Direct) on this input.



# PRINCIPLE OF AUDIO↔VIDEO SWITCHOVER



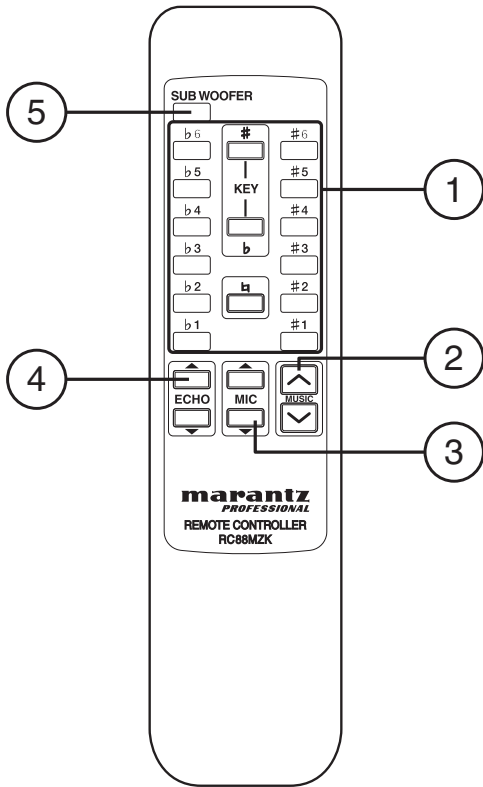
## AUTOMATIC AUDIO↔VIDEO SWITCHING

- This unit is capable of detecting the audio and/or video input signals and switching the input function automatically in the priority order of; 1) DVD; 2) CD; 3) AUX; 4) TAPE; 5)BGM
- When switching to KARAOKE, DVD and AUX, it is possible to select the types of signals (audio only, video only, audio and video combined) as input function switching.
  - AUDIO : Switching based on the audio signal only.
  - A & V : Switching based on either audio or video signals.
  - VIDEO : Switching based on the video signal only.
- With AUX and TAPE, the KARAOKE ↔ BGM selector switches can be used to select self-holding or non self-holding status. The self-holding status is set by setting the switches to the KARAOKE position; the non self-holding status is set by setting the switches to the BGM position.
  - KARAOKE : The AUX and TAPE function does not switch to DVD or CD, even when a DVD or CD signal is input.
  - BGM : The AUX and TAPE function switches to DVD or CD when a DVD or CD signal is input.

# REMOTE CONTROL

English

## Names of parts and their Functions



### ① KEY Control Buttons

- UPWARD (#1 to #6)  
The key can be transposed up to 2.5 tones above the standard key via 6 steps, each a half tone.
- NATURAL (♮)  
Press to reset to the NATURAL key.
- DOWNWARD (♭ 1 to ♭ 6)  
The key can be transposed up to 2.5 tones below the standard key via 6 steps, each a half tone.  
(The key returns to the standard key after every tune.)

### ② MUSIC VOL Control Buttons

- Press one of the buttons to increase or decrease the music volume. The LED on the MUSIC VOL control of the main unit blinks during the adjustment. Fine adjustment is available by pressing the buttons intermittently.

### ③ MIC MASTER VOL Control Buttons

- Press one of the buttons to increase or decrease the overall volume of the microphones. The LED on the MIC MASTER VOL control of the main unit blinks during the adjustment. Fine adjustment is available by pressing the buttons intermittently.

### ④ ECHO VOL Control Buttons

- Press one of the buttons to increase or decrease the amount of echo.

### ⑤ SUB WOOFER

- Press this switch to turn the subwoofer output on or off.

## Operation of Wireless Remote Control Unit

### 1. Wireless remote control

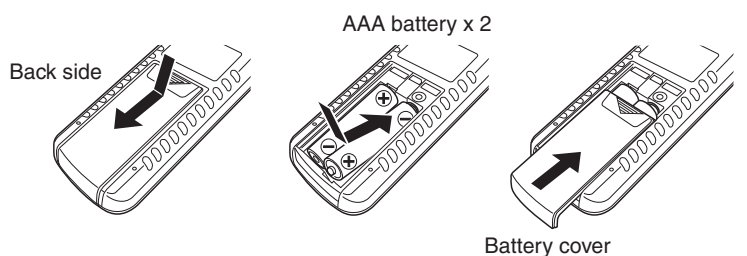
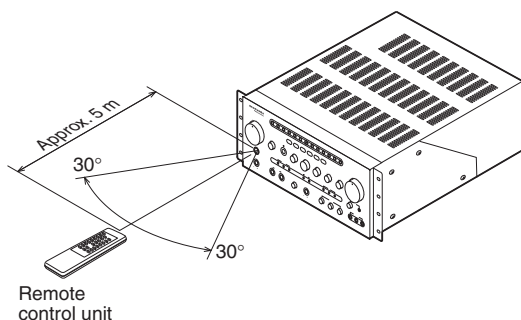
The distance between the wireless remote control unit and the light receptor of this unit should be less than about 5 meters. Note that the remote control may not operated if the light transmitter window of the remote control unit is pointed to other direction than the light receptor or if there is an obstacle between the remote control unit and light receptor.

### 2. Loading batteries

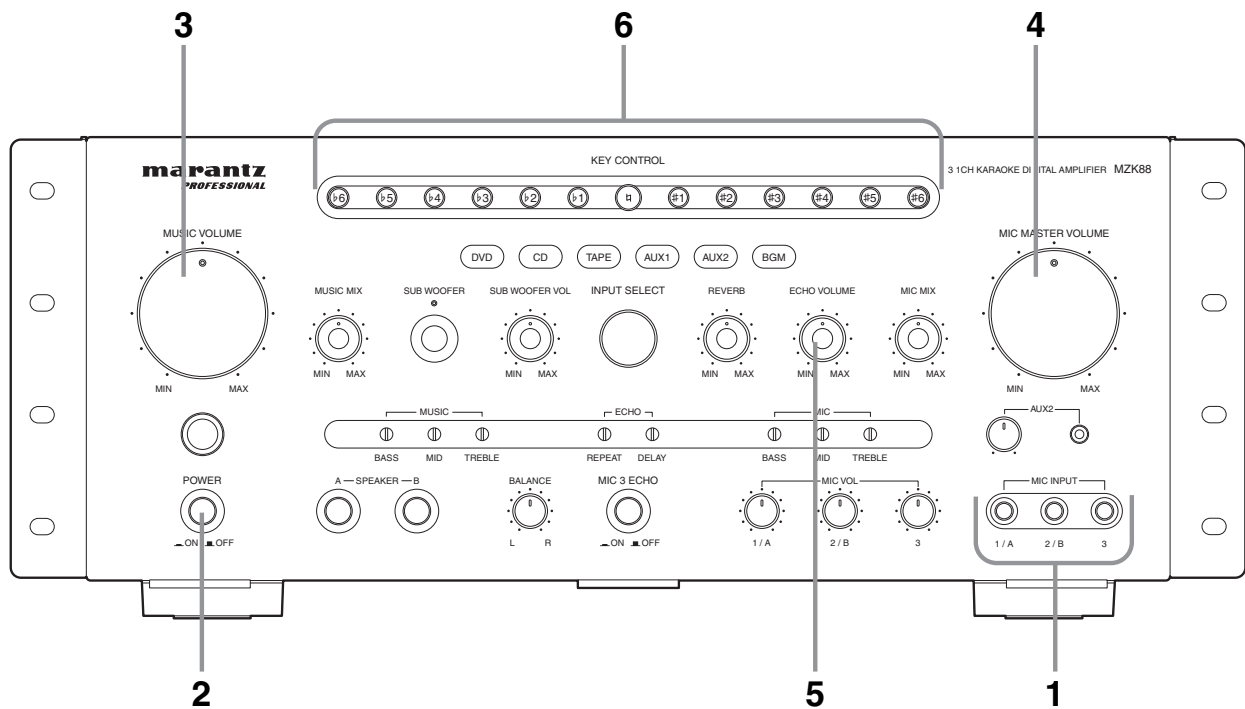
The life of the batteries used in the remote control unit is about half a year under normal use. If the remote control unit is to be unused for an extended period, remove the batteries. When the batteries become weak, replace them earlier.

Improper use of batteries may cause a risk of battery leakage and explosion.  
Be careful to obey the following guidelines:

- (1) Insert batteries so that the positive (+) and negative (-) poles are positioned as indicated on the battery case.
- (2) Do not use old and new batteries together.
- (3) Even if the shapes are the same, the voltage of batteries may vary depending on the models. Be careful not to use different models of batteries together.
- (4) Do not dispose of used batteries as burnable waste.



# GENERAL OPERATION



- 1 Connect the required number of microphones.
- 2 Set the Power switches of this unit and other required components to ON (by pressing them in ).
- 3 Play the KARAOKE music source component, and adjust the volume with the MUSIC VOL control.
- 4 Adjust the balance between the volumes of the microphones, and the balance between the overall microphone and music volumes, by turning the MIC VOL and MIC MASTER VOL controls.
- 5 Adjust the echo level using the MAIN ECHO VOL control.
- 6 Set the desired key by the DIGITAL KEY CONTROLLER buttons.

## Notes for the Proper Use of Microphones

- Talk into the microphone by holding it at a distance of 5 to 10 centimeters from your mouth.
- To ensure clear sound, hold the microphone in a position a certain distance from the head.
- Do not block the lower part of the windscreen. This will disturb proper voice reproduction with unclear bass, and howling also tends to occur in such cases.

5 to 10 cm (2 to 4 in.) away from your mouth.

Hold the microphone at a certain distance from the head.



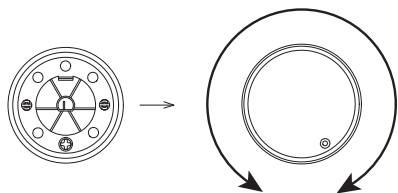
## TO STOP THE VOLUME KNOB IN THE DESIRED POSITION

When the Music or Mic knobs are turned clockwise, the default “stop” position is “10” when the unit is supplied. This setting can be changed as follows:

1 Remove the volume knob from the MZK88.

2 Remove the screw from the volume knob.

When supplied, the stopper is set as follows:

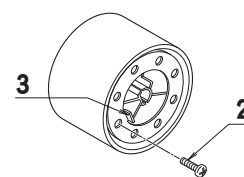
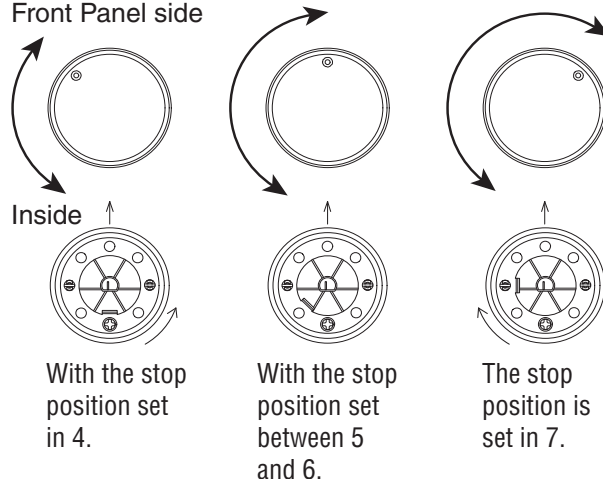


The volume knob can be turned from 0 to 10.

3 Remove the stopper from the volume knob and set it according to the figures below.

4 Fix the screw and then attach the knob to the MZK88.

Setting Examples  
Front Panel side



## TO ATTACH THE RACK MOUNT BRACKET

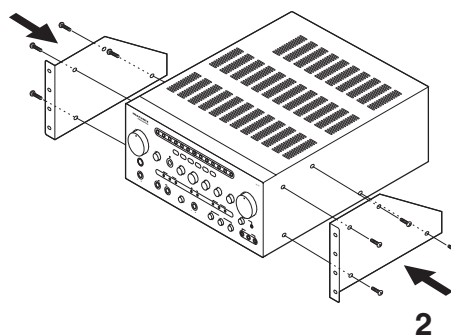
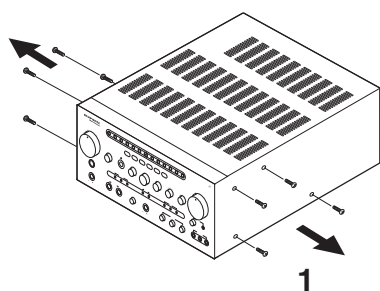
1 Remove the screws from the both side.

2 Fix the included brackets with the removed screws.

### Caution:

Never use the screw to fix the bracket except the screw of MZK88 side.

If other screws are used, it may cause drop the MZK88 or injure the inside.



## MAINTENANCE

When the set gets dirty, wipe with a soft, dry cloth. If the set is extremely dirty, soak a soft cloth in a solution 5/6% tableware detergent, wring it out thoroughly, wipe the dirt away, and finally wipe off the set again with a dry cloth.

Never use alcohol, thinner, benzene, insecticide or other volatile agents, for they may damage the surface paint or gloss of the set.

Also do not wipe the set with a chemical cloth or leave it on the set for a long period, for the surface finish may deteriorate or the paint may be stripped off.

# TROUBLESHOOTING

Should faults occur, it is in many cases due to a simple operation mistake or like. On the basis of the following checks you will be able to rectify a number of faults yourself without difficulty.

If the fault cannot be remedied after the following check, please consult your dealer.

Symptom	Possible Causes	Remedy
No speaker sound is output at all.	<ol style="list-style-type: none"> <li>1. The Power ON/OFF switch is set to "OFF".</li> <li>2. The Power cord is unplugged.</li> <li>3. The MUSIC VOL control is in the lowest position.</li> </ol>	<ol style="list-style-type: none"> <li>1. Set the Power ON/OFF switch to "ON".</li> <li>2. Plug the power cord securely into the power outlet.</li> <li>3. Adjust the MUSIC VOL control.</li> </ol>
No sound is output from one of the speakers.	<ol style="list-style-type: none"> <li>1. The BALANCE control is turned fully to an extreme position.</li> <li>2. One of the speaker cords is disconnected.</li> </ol>	<ol style="list-style-type: none"> <li>1. Set the control to the center position.</li> <li>2. Insert the cord securely into the terminals.</li> </ol>
No microphone sound is output.	<ol style="list-style-type: none"> <li>1. The microphone plug is not fully inserted.</li> <li>2. The switch on the microphone is set to "OFF".</li> <li>3. The corresponding MIC VOL or MIC MASTER VOL controls are in the minimum position.</li> <li>4. The microphone is too far from your mouth, or the microphone handling is incorrect.</li> </ol>	<ol style="list-style-type: none"> <li>1. Insert the plug securely into the jack.</li> <li>2. Set the switch on the microphone to "ON".</li> <li>3. Adjust the control.</li> <li>4. Refer to the user manual supplied with your microphone.</li> </ol>

# AFTER-SALES SERVICING

- ① If this unit is found to be defective, your local dealer will repair or replace defective parts at charge on request.
- ② Before requesting a repair from your local dealer, see the "TROUBLESHOOTING" section and recheck it.

**For the dealer :**

If the customer requests after-sales service, please first check the following points:

- Confirm the details of any accident.
- Check out all cables and connections.
- Cautions regarding operation and instructions on using the system to your customer.

If the unit is found to be defective and it is difficult to repair, bring the defective unit to your nearest marantz authorized service center.

# ETIQUETTE OF SOUND



The KARAOKE performance you enjoy may be disturbing others. When performing KARAOKE, be sure to consider your neighbors.

You can control the volume of KARAOKE. Remember that even small sounds travel easily during quiet nights, so be especially careful during KARAOKE performances at night. We recommend closing windows to avoid sound leakages to neighbors, and having consideration for the comfortable living environments of others.

# COPYRIGHT

- Broadcasting and music sources such as recorded music tapes, DVDs, video tapes, CDs and so on are strictly protected under copyright law.

- You require permission from the copyright holder to use, distribute, or rent these music sources for commercial use, or sell dubbed media to other people; except when enjoying these sources by yourself.

# SPECIFICATIONS

## Amplifier

Maximum Output (1 kHz, 8 Ω, 10% THD)  
 ..... 200 W + 200 W + 200 W  
 Maximum Output (1 KHz, 4 Ω, 10% THD)  
 ..... 280 W + 280 W + 280 W  
 Total Harmonic Distortion ..... 0.1%  
 (1 kHz, 50 W, 8 Ω)

## Audio Input (Sensitivity/Impedance)

DVD, CD, TAPE, AUX1, AUX2 ..... 150 mV/25 kΩ  
 BGM ..... 450 mV/25 kΩ  
 MIC ..... 4.3 mV/5 kΩ

## Audio output (Output level/Output impedance)

PRE ..... 800 mV/1 kΩ  
 EFFECTOR ..... 180 mV/1 kΩ  
 SUBWOOFER ..... 1 V/1 kΩ

## Frequency Responses

MUSIC ..... 20 Hz to 15 kHz, +4/-2 dB  
 MIC ..... 40 Hz to 15 kHz, +3/-3 dB

## Tone Control Characteristics

MUSIC      BASS ..... +13/-10 dB (100 Hz)  
                  MID ..... ±12 dB (1 kHz)  
                  TREBLE ..... +12/-10 dB (10 kHz)  
 MIC              BASS ..... ±13 dB (100 Hz)  
                  MID ..... ±13 dB (1 kHz)  
                  TREBLE ..... +12/-8 dB (10 kHz)

Speaker Impedance ..... 4 Ω to 16 Ω  
 (1 system only 1 or 2)  
    8 Ω to 16 Ω  
 (2 system operation 1 and 2)

Key Control Range ..... 13 steps, ±3 tones

## Video Input

(Sensitivity/Input impedance) ..... 1 Vp-p/75 Ω

## Video Output

(Output level/Impedance) ..... 1 Vp-p/75 Ω

## Power Supply, etc.

### Supply Voltage

Singapore, Malaysia version  
 ..... AC 230 V, 50 Hz / 60 Hz  
 China version ..... AC 220 V, 50 Hz

Power Consumption ..... 750 W  
 (Idling) ..... 42 W

## AC Power Outlets

UNSWITCHED (200 W max.) ..... 2  
 SWITCHED (100 W max.) ..... 1

## Dimensions (W x H x D)

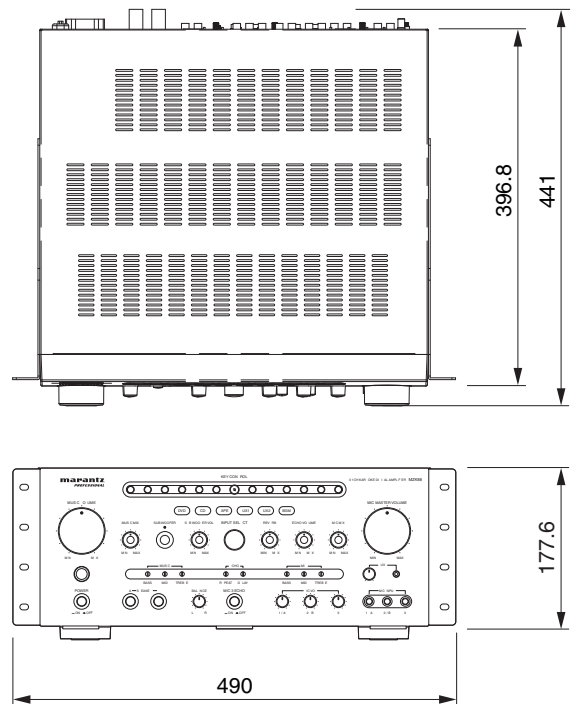
..... 490 mm x 177.6 mm x 441 mm  
 Weight ..... 17 kg

## Accessories

User Guide ..... 1  
 Wireless Remote Control Unit (RC88MZK) ..... 1  
 AAA Size Batteries ..... 2  
 Rack mount bracket ..... 2  
 Pointer Label ..... 1

- Design and specifications subject to change without notice.

## DIMENSIONS (mm)





# D&M Holdings Inc.

**PROFESSIONAL BUSINESS COMPANY**

TOKYO, JAPAN

<http://www.d-mproasia.com/main/>

