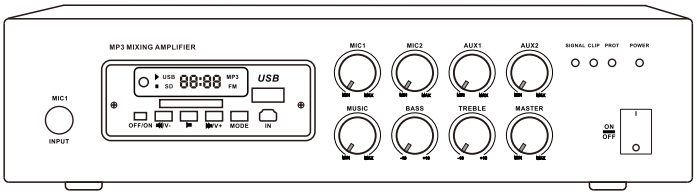
User Manual



MP3 MIXING AMPLIFIER

Thank you for purchasing **the Mp3 Mixing Amplifier.**

Please carefully follow the instructions in this manual to ensure long, trouble-free use of the equipment.

Packaging Contents

Amplifier.....1
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FM Antenna.....1
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SAFETY PRECAUTIONS

※ Be sure to read the instructions in this section carefully before use.

※ Make sure to observe the instructions in this manual as the conventions of safety symbols and messages regarded as very important precautions are included.

※ We also recommend you keep this instruction manual handy for future reference.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING

When Installing the Unit

※ Do not expose the unit to rain or an environment where it may be splashed by water or other liquids,as doing so may result in fire or electric shock.

※ Use the unit only with the voltage specified on the unit. Using a voltage higher than that which is specified may result in fire or electric shock.

※ Do not cut, kink, otherwise damage nor modify the power supply cord. In addition, avoid using the power cord in close proximity to heaters, and never place heavy objects -- including the unit itself -- on the power cord, as doing so may result in fire or electric shock.

※ Be sure to replace the unit's terminal cover after connection completion. Because high voltage is applied to the speaker terminals, never touch these terminals to avoid electric shock.

※ Be sure to ground to the safety ground (earth) terminal to avoid electric shock. Never ground to a gas pipe as a catastrophic disaster may result.

※ Avoid installing or mounting the unit in unstable locations, such as on a rickety table or a slanted surface. Doing so may result in the unit falling down, causing personal injury and/or property damage.

When the Unit is in Use

※ Should the following irregularity be found during use,immediately switch off the power,disconnect the power supply plug from the AC outlet and contact your nearest dealer.Make no further attempt to operate the unit in this condition as this may cause fire or electric shock.

·If you detect smoke or a strange smell coming from the unit.

·If water or any metallic object gets into the unit.

·If the unit falls, or the unit case breaks.

·If the power supply cord is damaged (exposure of the core, disconnection, etc.)

·If it is malfunctioning (no tone sounds.)

※ To prevent a fire or electric shock, never open nor remove the unit case as there are high voltage components inside the unit. Refer all servicing to your nearest dealer.

※ Do not place cups, bowls, or other containers of liquid or metallic objects on top of the unit. If they accidentally spill into the unit, this may cause a fire or electric shock.

※ Do not insert nor drop metallic objects or flammable materials in the ventilation slots of the unit's cover, as this may result in fire or electric shock.

CAUTION

When Installing the Unit

※ Never plug in nor remove the power supply plug with wet hands, as doing so may cause electric shock.

※ When unplugging the power supply cord, be sure to grasp the power supply plug; never pull on the cord itself. Operating the unit with a damaged power supply cord may cause a fire or electric shock.

※ When moving the unit, be sure to remove its power supply cord from the wall outlet.

Moving the unit with the power cord connected to the outlet may cause damage to the power cord, resulting in fire or electric shock. When removing the power cord, be sure to hold its plug to pull.

※ Do not block the ventilation slots in the unit's cover.

Doing so may cause heat to build up inside the unit and result in fire.

※ Avoid installing the unit in humid or dusty locations,in locations exposed to the direct sunlight, near the heaters,or in locations generating sooty smoke or steam as doing otherwise may result in fire or electric shock.

When the Unit is in Use

※ Do not place heavy objects on the unit as this may cause it to fall or break which may result in personal injury and/or property damage.In addition,the object itself may fall off and cause injury and/or damage.

※ Make sure that the volume control is set to minimum position before power is switched on.
Loud noise produced at high volume when power is switched on can impair hearing.

※ Do not operate the unit for an extended period of time with the sound distorting.
This is an indication of a malfunction, which in turn can cause heat to generate and result in a fire.

※ Contact your dealer as to the cleaning. If dust is allowed to accumulate in the unit over a long period of time, a fire or damage to the unit may result.

※ If dust accumulates on the power supply plug or in the wall AC outlet, a fire may result.
Clean it periodically. In addition, insert the plug in the wall outlet securely.

※ Switch off the power, and unplug the power supply plug from the AC outlet for safety purposes when cleaning or leaving the unit unused for 10 days or more.
Doing otherwise may cause a fire or electric shock.

LIMITED WARRANTY

We warrant that the hardware products it manufactures will be free from defects in materials and workmanship.

The warranty term,beginning on the date of invoice,is one year for Parts replacement,two years for parts repair and six months on accessories.

This warranty does not cover damage or failure caused by alterations, mishandling, abuse, misuse, neglect, accident or resulting from any cause other than a product defect.

In case of defects in material and workmanship under normal use and conditions,we will replace or repair products covered under this limited warranty that are returned to our facility.

To request warranty service, you must contact our international sales team within the warranty period, ship the products back to us in their original or equivalent packaging (freight prepaid). If we repair or replace a product, its warranty term is not extended.

DISCLAIMER

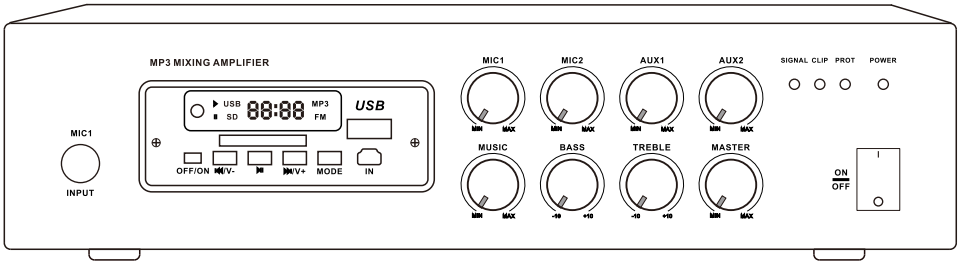
Information contained in this manual is subject to change without prior notice and does not represent a commitment on the part of the vendor. We shall not be liable for any loss or damages whatsoever arising from the use of information or any error contained in this manual.

It is recommended that all services and repairs on this product be carried out by us or its authorized dealer.

This product must only be used for the purpose it was intended by the manufacturer and in conjunction with this operating manual.

We cannot accept any liability whatsoever for any loss or damages caused by service,maintenance or repair by unauthorized personnel,or by use other than that intended by the manufacturer.

DESCRIPTION & FEATURE



This compact mixing amplifier is designed as convenient solution for small PA installations with USB player,Bluetooth and FM tuner receiver in a compact housing.

And this amplifier features two unbalanced microphone inputs and two AUX inputs,moreover the MIC1 has "VOICE PRIORITY" over the other inputs except of the alarm input, moreover a group of line level output is available for adding additional amplifier.

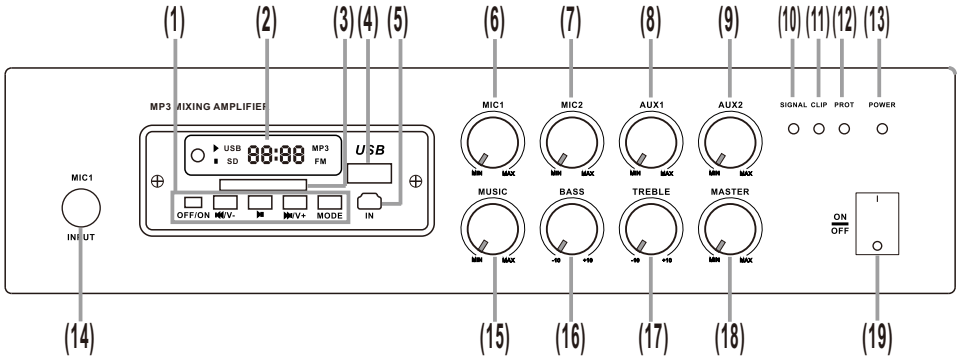
Equipped with step-up transformer to be best suitable for any 70-volt or 100-volt line public address system,in the same time 4~16 Ohm output load is also provided.

Level controllers include individual volume controller for inputs,master volume controller for all,BASS and TREBLE tone controllers.

Complete protection is provided for over temperature,over voltage,over load and short circuit speaker line conditions.

※ Built-in music streaming media including USB player,FM tuner and Bluetooth receiver.
※ 70/100-volt and 4~16 ohms(Ω) output loads.
※ Two microphone (MIC1 & MIC2) jacks,MIC2 supports 48V Phantom Power with switch ON/OFF.
※ EMC input has priority over the other inputs.
※ SMT circuit boards with highly stable performance.
※ High-definition display for the working status of playing programme.
※ Individual volume controller for inputs,and master volume controller for all.
※ BASS and TREBLE tone controllers.
※ Power supply AC100-240V and DC24V.
※ Protection provided for output short circuit,overload,high temperature,peak current limiters.

FRONT PANEL



(1) Playing Controllers:

OFF/ON: This button shall switch on or off the media player.

⏮ / V-: This button shall return to the previous song.

Or keep pressing to reduce the volume.

⏯ : This button shall play or pause the song.

⏭ / V+: This button shall skip to the next song.

Or keep pressing to increase the volume.

MODE: Allows to choose the media source among USB,SD,FM,LINE IN,BLUETOOTH.

(2) Screen: Displays the working status of playing programmes.

(3) SD Input Interface: Allows to play SD card.

(4) USB Input Interface: Allows to play USB disk.

(5) Line-In Interface: Allows to connect external audio source.

(6) MIC1 Knob: Allows to control the volume of MIC1 input interface on the front panel.

(7) MIC2 Knob: Allows to control the volume of MIC2 input interface on the rear panel.

(8) AUX1 Knob: Allows to control the volume of AUX1 input interface.

(9) AUX2 Knob: Allows to control the volume of AUX2 input interface.

(10) SIGNAL Indicator: Lights green when the amplifier works.

(11) CLIP Indicator: Lights yellow when amplifier is overdriven.

(12) PROT Indicator: Lights red in the case of protection mode.

(13) POWER Indicator: Lights blue when the amplifier is powered on.

(14) MIC1 Input Interface: Allows to receive 6.35mm jack.

(15) MUSIC Knob: Allows to control the volume of the media of USB/SD/BT/FM.

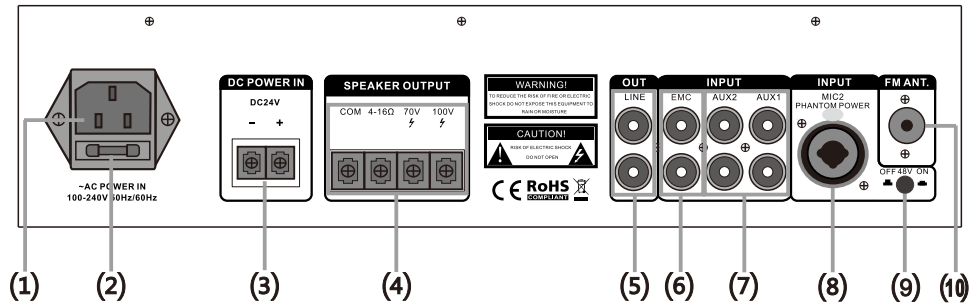
(16) BASS Knob: Controls the bass tone of the amplifier output.

(17) TREBLE Knob: Controls the treble tone of the amplifier output.

(18) MASTER Knob: Collectively controls the sound level of all outputs.

(19) POWER: Power switch ON/OFF.

REAR PANEL



(1) AC Power Inlet:
This Switching Mode Power Supply accepts AC100~240V with a standard 3-pin plug.

(2) AC Fuse Drawer:
Contains one main T3.15A fuse and one spare T3.15A fuse.

(3) DC Power Inlet: It accepts DC24V power supply.

(4) Speaker Output Terminals: **COM, 4~16Ω, 70V, 100V**
It's only possible to use one output at the same time,connecting more than one may damage internal parts of the amplifier.Each of 100V,70V,4~16Ω terminals must work with COM. Please refer to separate pages in this manual for more details on the connection terminals.

(5) Line Output Connectors: These RCA connectors allow to add additional amplifier.

(6) EMC Input Connectors: These RCA connectors allow to receive the EMC/alarm signal overriding the other inputs.

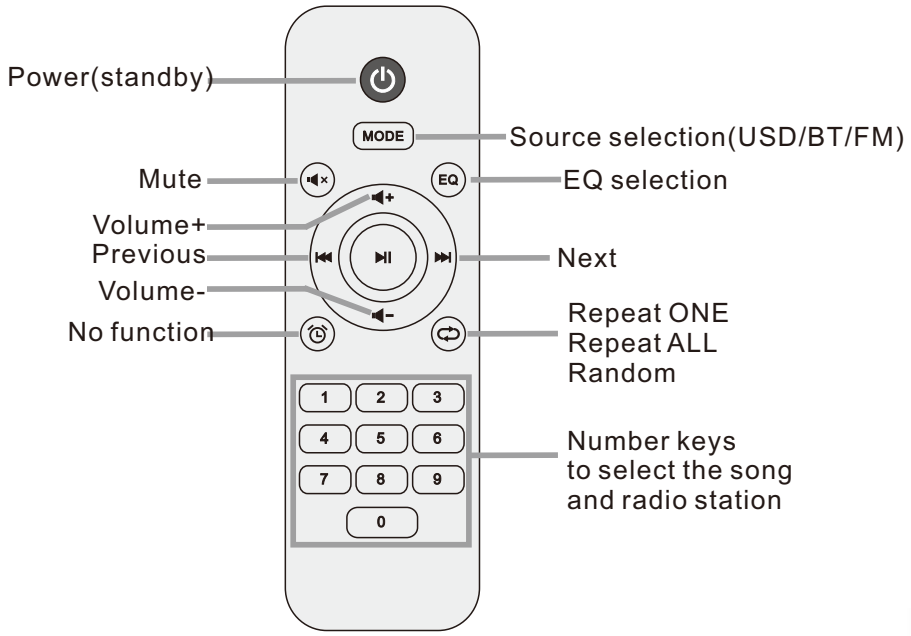
(7) AUX Input Connectors:
These two group of connectors allow to accept stereo “L” & “R” RCA connection,then converted to mono mode internally.

(8) MIC2 Input Interface: Allows to receive 6.35mm plug or XLR plug.

(9) Phantom Power Switch: Push to switch on or off the MIC2 48V Phantom Power.

(10) FM Antenna Jack: Allows to connect a supplied FM antenna.

REMOTE CONTROL



SPECIFICATION

Model	RM-60MT	RM-120MT
Rated Power	60W	120W
Speaker Output Mode	Low impedance:4-16 ohms (Ω)	
	Voltage line:70V & 100V	
Compatible Media	USB,SD,Bluetooth,FM,Aux In	
Playable Formats	MP3,WMA,WAV,FLAC,APE	
Bluetooth Name	BGM SYSTEM	
Bluetooth Frequency	2402~2480 MHz	
Bluetooth E.I.R.P	2 dBm	
FM Tuner Frequency	87.50~107.50 MHz	
Frequency Response	60 Hz ~ 15k Hz (± 3 dB)	
T.H.D	<1% at 1kHz,1/3 rated power	
S/N	≥75dB	
Tone Control	BASS:100 Hz (± 10 dB) , TREBLE:10k Hz (± 10 dB)	
Protection	Short circuit,overload,high temperature	
AC Power Supply	AC100V~230V / 50Hz, 0.33A	
AC Fuse	T3.15A	
DC Power Supply	DC24V, 3.13A	
Power Cord	(3×0.75 mm^2)×1.5M	
Dimension	71(H)×300(W)×191(D) mm	
Carton Size	120(H)×350(W)×255(D) mm	
Net Weight	4.90kg	5.50kg
Gross Weight	5.60kg	6.10kg

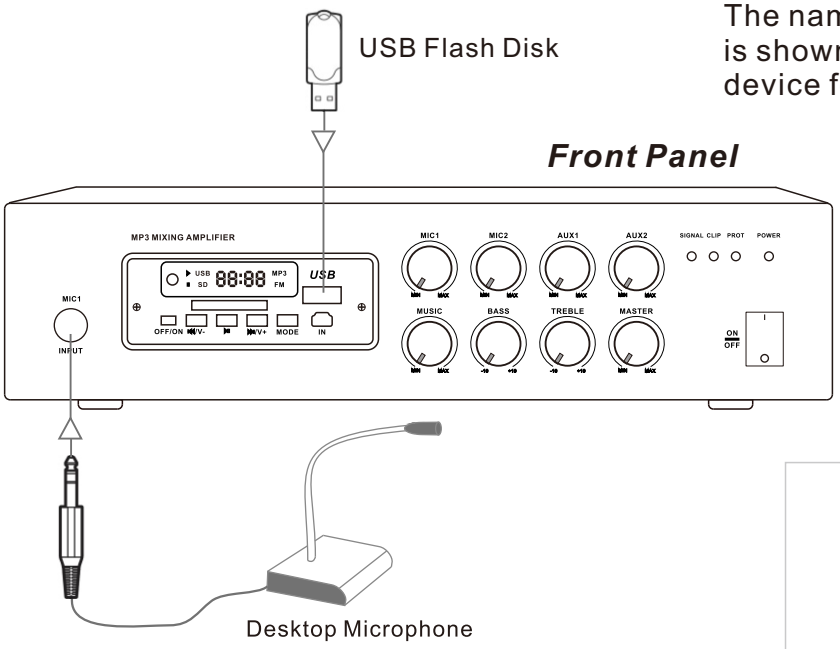
Specifications are typical; individual unit might vary.
Specifications are subject to change and improvement without prior notice.

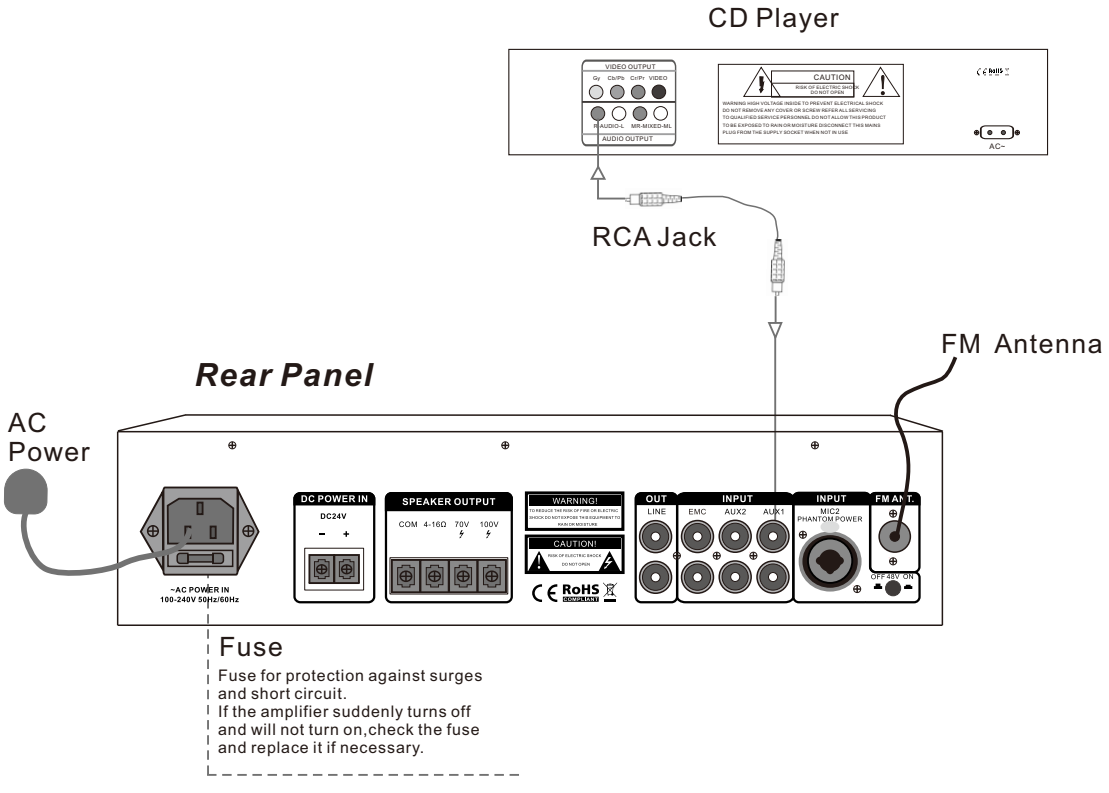
CONNECTION ILLUSTRATION

Media source: USB/SD/Bluetooth/FM/Line-in

Bluetooth connection

The name "**BGM SYSTEM**" is shown on the mobile device for pairing.





**** Notes:***

Please refer to separate pages for details of connections of speakers.

Please refer to separate page for details of Bluetooth operations.

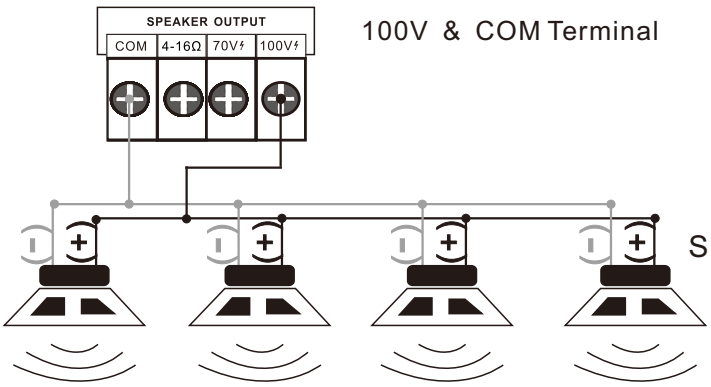
SPEAKER CONNECTION

Important Notes:

This amplifier has different loudspeakers outputs of 100V,70V and low impedance 4~16Ω.
It's only possible to use one output at the same time,connecting more than one may damage internal parts of the amplifier.Each of 100V,70V,4~16Ω terminals must work with COM. (common) terminal.

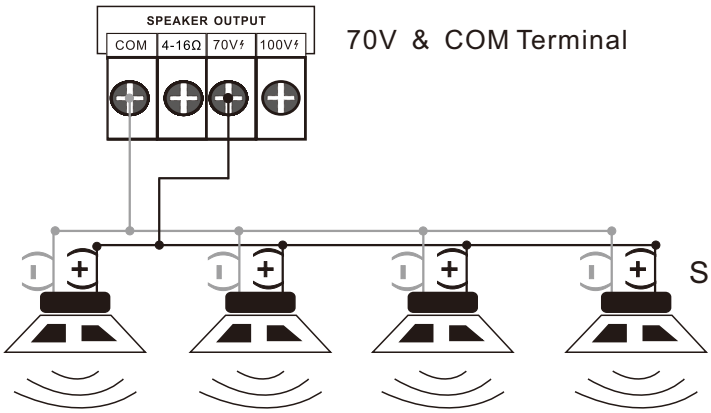
100V line output

This system is most commonly used in for PA system. Only use 100 V line loudspeakers with transformers. All loudspeakers are wired in parallel and the sum of their power must not exceed the rated output power of the amplifier. **It is advisable not to load the amplifier at more than 70% of its rated output power when using music sources.**



70V line output

This system is common in the USA, it operates on the same principles as 100 V line except that at rated output power the amplifier has 70V RMS on its output terminals.

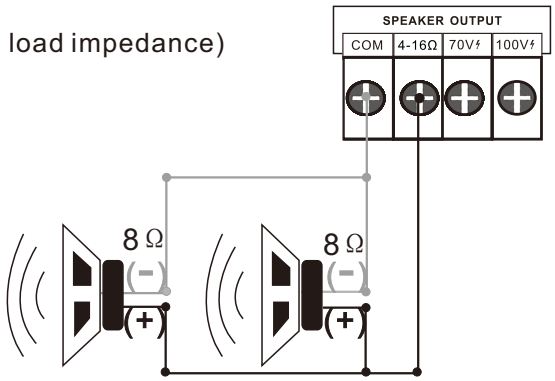


4~16Ω low impedance output

This output allows connection of low impedance loudspeakers without transformers,
When two or more loudspeakers are used ensure that they are wired in
such a way in Series, or in Parallel, or in Series & Parallel Combination that total load impedance remains at 4 to 16Ω.

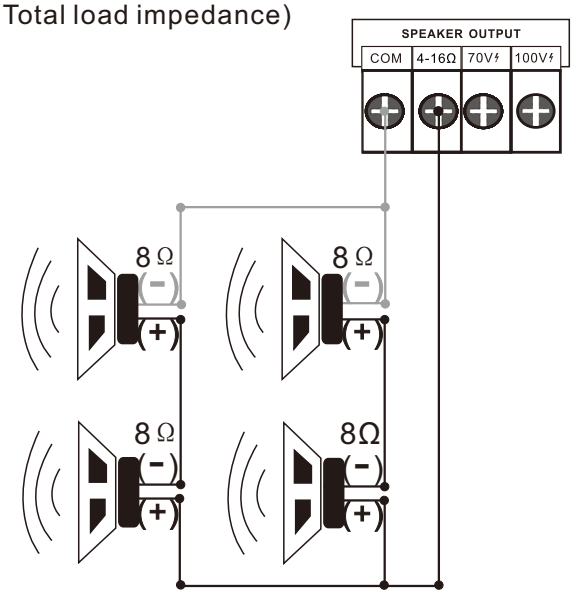
A. Connecting speakers in Parallel. **4Ω & COM Terminal**

$\frac{8\,\Omega}{2} = 4\,\Omega$ (Total load impedance)



B. Connecting speakers in Series & Parallel combination. **8Ω & COM Terminal**

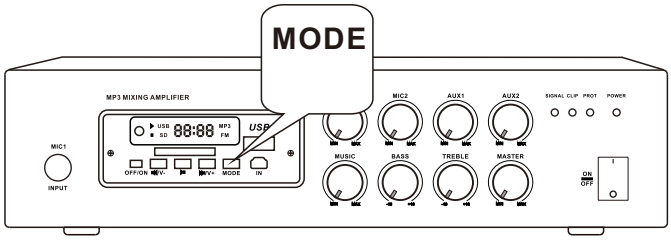
$\frac{8\,\Omega \times 2}{2} = 8\,\Omega$ (Total load impedance)



BLUETOOTH OPERATIONS

*Note: The Bluetooth name of this amplifier is "**BGM SYSTEM**"

In order to enjoy music from a Bluetooth device on this amplifier, the Bluetooth device must first be paired with this amplifier.
Once the Bluetooth device has been paired, it does not need to be paired again.
1. Press the MODE button on the front panel of the amplifier to switch the input source to "Bluetooth".



2. Activate the Bluetooth settings on your mobile device.



3. Select this unit "**BGM SYSTEM**" when its name appears in the list of devices displayed on the screen of your mobile device.
Perform the connection with your mobile device close to the unit (about 1 m).
At the end of the pairing,the name "BGM SYSTEM" appears on the paired list of your mobile device.

*Note: Enter "**1688**" when the password is requested on the screen of the your mobile device.



4. Play music using any app on your moblie device.
* The next time the input source is switched to Bluetooth, this amplifier automatically connects to the last Bluetooth device that was connected.





CAUTION: Do not open the equipment cover arbitrarily, so as not to electric shock. Please contact the professionals to maintian if necessary.

The products are constantly improving,subject to change without prior notice.