

LYINTL

6 Zone 240W Digital Matrix Power Amplifier with USB, Bluetooth, FM & Remote Paging MA-6240



User Manual

Thank you for purchasing our 6-Channel Matrix Mixer Amplifier MA-6240.

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

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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.

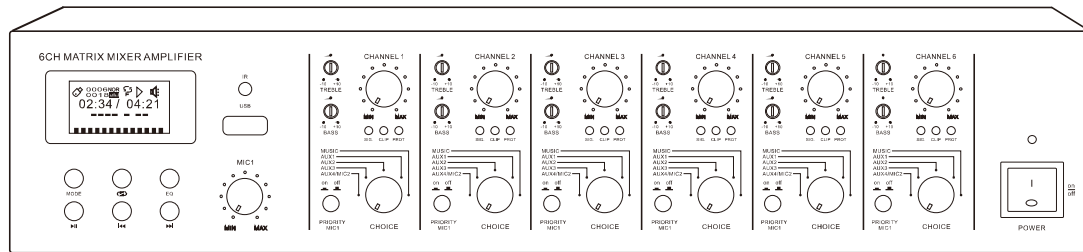
※ Contact your dealer as to the cleaning. If dust is allowed to accumulate in the unit over a long period of time, a fire or damage to the unit may result.

※ 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.

DESCRIPTION & FEATURE

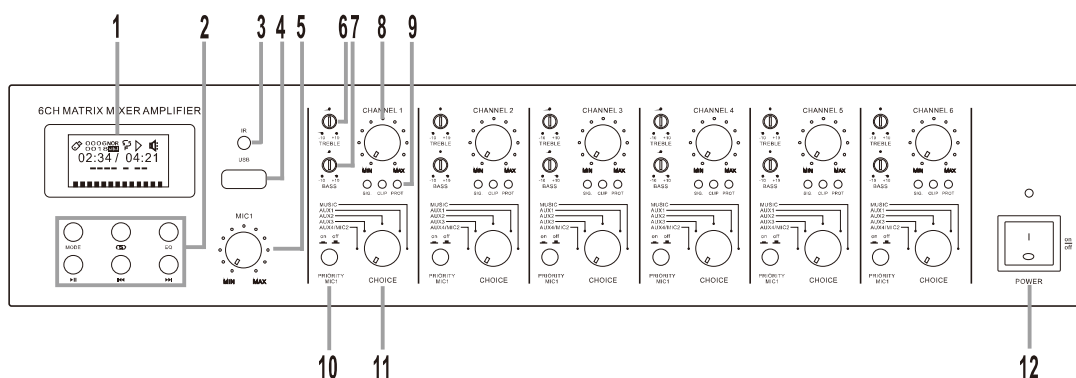


This Matrix Amplifier is equipped with six units of amplifier with six 100V and 8Ω speaker outputs respectively, with media player of USB/Bluetooth/FM and four AUX inputs, each zone can enjoy different audio source in a matrix way.

Can support connecting 4 remote microphones, which can make voice announcement to any selected zone or zones remotely.

Maximum six amplifiers can be linked together to realize totally 36-zone speaker system, ideal for multi-room and multi-music applications.

- ✧ Equipped with 6 units of amplifier with output power 6*120W or 6*240W.
- ✧ 6 different zones with 100V and 8Ω speaker loads.
- ✧ Built-in Mp3 module with USB player, BT, FM tuner.
- ✧ LCD screen with display size (128*64) to show all details of playing.
- ✧ Matrix audio choice: 5 audio inputs (AUX1/AUX2/AUX3/AUX4/MUSIC) can be selected for any channel/channels.
- ✧ 6 line outputs are available to connect additional amplifiers if power (watt) is not enough when add more speakers.
- ✧ Can connect 4 remote microphones via CAT5 or 6 cable, which can make voice announcement to any selected zone or zones.
- ✧ Two local combo microphone jacks allow to connect 6.35mm or XLR plug (48V phantom power available).
- ✧ 6 alarm inputs to receive the triggering signal from fire alarm system.
- ✧ Priority level: Remote MIC > ALARM > Local MIC > AUX.
- ✧ Maximum six amplifiers can be linked together to realize totally 36-zone speaker system.
- ✧ Removable rack mount brackets are supplied.
- ✧ Features complete protection is provided for output short, high temperature, peak current limiters.

FRONT PANEL


1. LCD Screen: Show all details of playing.

2. Media Source Controllers:

MODE: To select the mode among USB,BT and FM.

REPEAT

Press this button to play a single song or all the songs repetitively,or to play the songs at random.

EQ: To create 4 different equalizer effects for the USB mode.

Play/Pause

Press this button to stop playing.

Press this button again to return to the song.

PREV

Press this button to return to the previous song or fm stored station.

Keep pressing this button for a few seconds to decrease the volume output of media.

NEXT

Press this button to move to the next song or fm stored station.

Keep pressing this button for a few seconds to increase the volume output of media.

3. IR Indicator: Infrared receiver for remote control.

4. USB Port: Allows to play U disk (audio format :APE,FLAC,WMA,WAV,MP3).

5. MIC1 Volume Control: Allows to adjust the volume of the local MIC1.

6. Treble Control: To adjust the treble tone for Channel 1.

7. Bass Control: To adjust the bass tone for Channel 1.

8. Volume Control: To adjust the volume of Channel 1.

9. LED Indicators:

SIG: It lights blue when the amplifier is working normally.

CLIP: It lights yellow when the amplifier is overdriven.

PROT: It lights red in the case of overheating or output short.

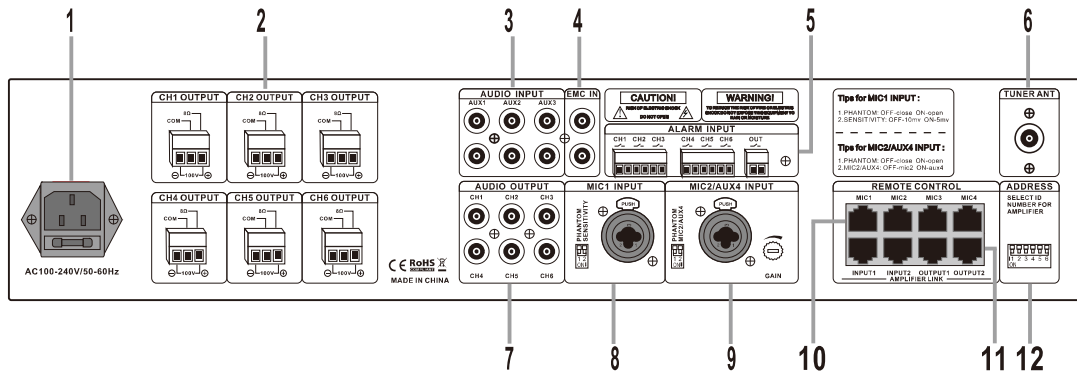
10. Priority Switch: Push this button down to allow the local MIC1 input to mute other audio sources including MUSIC/FM/AUX1/AUX2/AUX3/AUX4/MIC2.

11. Audio Source Selector:

Allow to select the audio source among MUSIC/AUX1/AUX2/AUX3/AUX4/MIC2.

(Note:MUSIC means the audio source from the media module with USB/BT/FM)

REAR PANEL

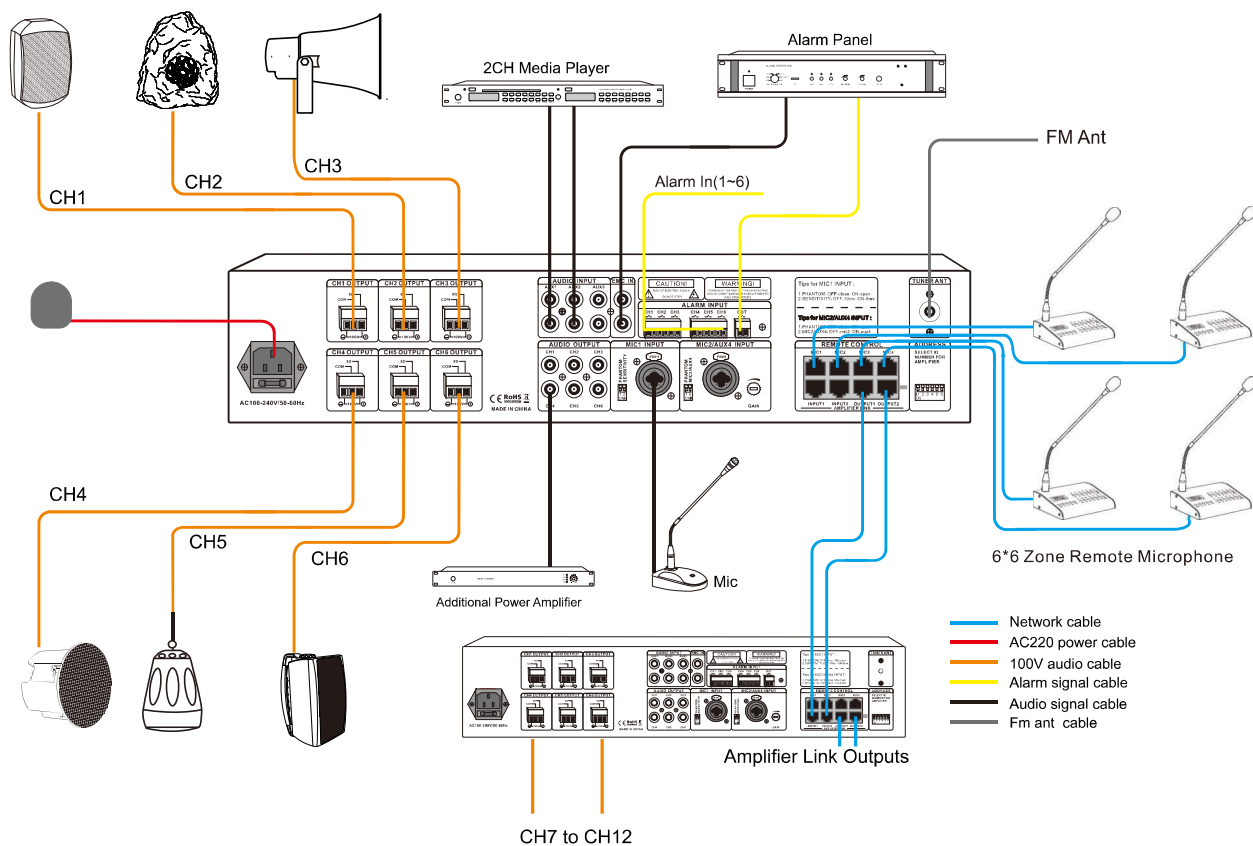


- 1. AC Power Inlet:** Connect the supplied power cord with 3-pin plug.
- 2. CH1-CH6 Speaker Loads** (please refer to page 7 for more details)
- 3. Audio Inputs (AUX1,AUX2,AUX3):** These RCA connectors allow to accept stereo “L” & “R” from external audio source device, then converted to mono mode internally.
- 4. EMC Input:** To receive EVAC message from the alarm interface.
- 5. Alarm Triggering Signal Connectors**
CH1-CH6 Connectors: To receive the triggering signal of short-circuit current from the fire alarm system.
OUT Connector: To provide triggering signal to alarm interface.
- 6. FM connector:** To connect the included FM antenna here.
- 7. Audio Output (CH1-CH6):**
 To supply signal to the additional amplifiers if power (watt) is not enough when add more speakers.
- 8. MIC1 Input Jack and DIP Switch:**
 This combo mic jack allows to connect 6.35mm or XLR plug.

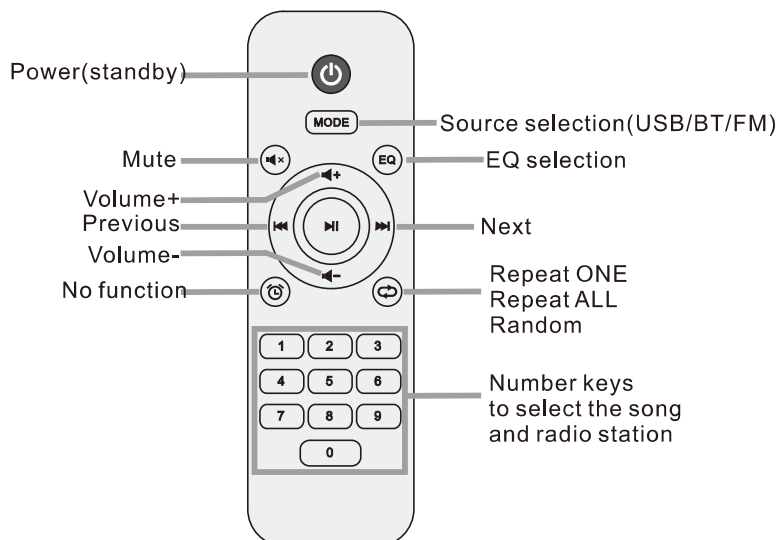
 Push the DIP switch 1 down to switch on the Phantom Power 48V.
 Push the DIP switch 1 up to switch off the Phantom Power 48V .
 Push the DIP switch 2 down to get MIC input sensitivity 5mv.
 Push the DIP switch 2 up to get MIC input sensitivity 10mv.
- 9. MIC2/AUX4 Input Jack and DIP Switch:**
 This combo mic jack allows to connect 6.35mm or XLR plug.

 Push the DIP switch 1 down to switch on the Phantom Power 48V.
 Push the DIP switch 1 up to switch off the Phantom Power 48V.
 Push the DIP switch 2 down to use this input as AUX4.
 Push the DIP switch 2 up to use this input as MIC2.
- 10. Rj45 Ports (MIC1-MIC4):**
 To connect with remote counterpart microphones via CAT5 or CAT6 cable.
- 11. Rj45 Ports:** To connect previous or next matrix amplifier (*please refer to connection diagram on Page 6 for more details*).
- 12. DIP Switch** for setting ID number of amplifier: Each one need different ID number when two or more matrix amplifiers are connected in one system.

CONNECTION ILLUSTRATION



REMOTE CONTROL



SPEAKER CONNECTION

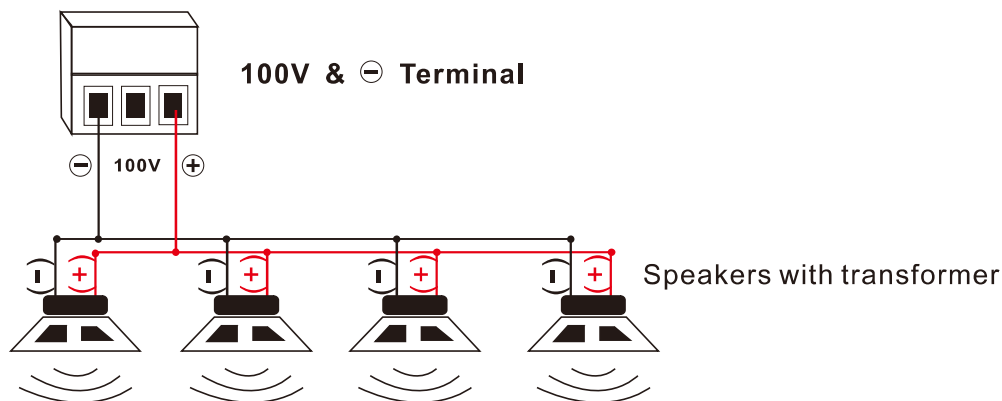
Important Notes

This amplifier has loudspeaker outputs of 100V and low impedance 8Ω.

It's only possible to use one output at the same time, connecting more than one may damage internal parts of the amplifier.

Most commonly used in for PA system with the loudspeakers built-in 100V step-down transformer. 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% to 80% of its rated output power when using music sources.**

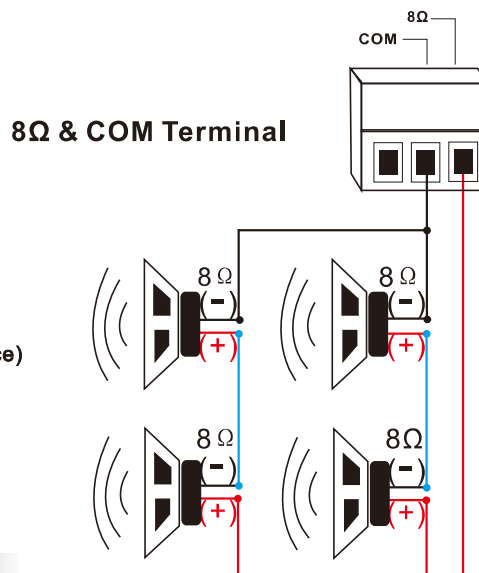
When use 100V loudspeakers for the pa system



When use low impedance loudspeakers

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 8Ω.

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



BT OPERATIONS

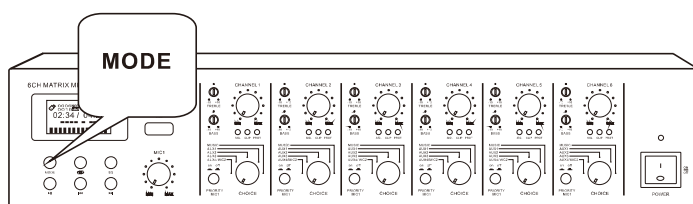
BT Operations

*Note: The BT name of this amplifier is “**BGM SYSTEM**”

In order to enjoy music from a BT device on this amplifier, the Bluetooth device must first be paired with this amplifier.

Once the BT 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 “BT”.



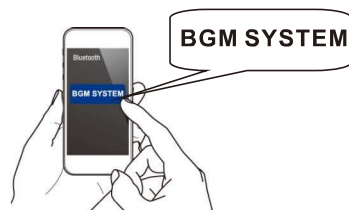
2. Activate the BT setting on your mobile device.



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.



4. Play music using any app on your mobile device.

* The next time the input source is switched to BT, this amplifier automatically connects to the last BT device that was connected.



SPECIFICATION

Model	MA-6240
Rated Power	6 x 240W
Compatible Media	USB/BT/FM
Input Audio (Matrix audio choice)	5 (Internal source/AUX1/AUX2/AUX3/AUX4)
Line Input	4 Port (AUX1/AUX2/AUX3/AUX4)
Line Output	6 port (CH1/CH2/CH3/CH4/CH5/CH6)
Alarm Input	6 port (CH1/CH2/CH3/CH4/CH5/CH6) (0V) Short cut signal (Alarm in)
Alarm Output	1 Port (0V) Short cut signal (Alarm Out)
USB	1 Port
EMC Input	1 Port
Remote Micro Input Port (Rj45)	4 Port
Priority Level	EMC > Remote Mic > Local Micro > the other audio inputs (BT/USB/AUX)
Frequency Response	80Hz~18Khz
Maximum Zone	36 Zone
Protection	short circuit,overload,high temperature
Power Supply	110-220VAC $\pm$ 10% 50-60HZ
Dimension(WxDxH)	430x330x90mm
Packing Size(WxDxH)	520x410x185mm
N.W	7.60kg
G.W	9.60kg

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



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

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