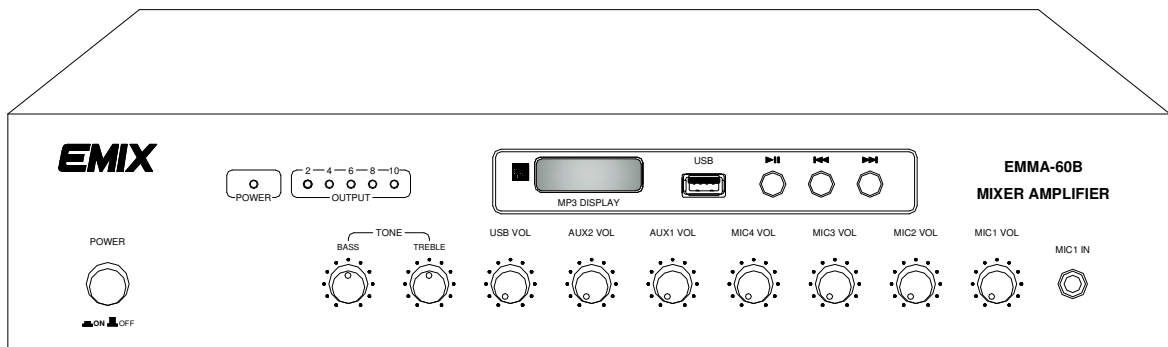




## Public Address System

### MP3 AMPLIFIER

### EMMA-60B MIXER AMPLIFIER



# OWNER'S MANUAL

For better use of this equipment, please read this manual carefully before use.

## **Message on Information of Instructions**

The instructions contain the introduction to product function, introduction to appearance, technical parameters, schematic diagram of connection, safety precautions, and after-sales service for the broadcasting power amplifier with MP3 /preamplifier in the types of EMMA-60B. It is necessary to read this manual prior to the connection and application.

**The functions and relevant technical parameters described in the instructions shall be applicable as of the completion of development of this product. The functions and technical parameters shall be subject to future change without prior notice.**

Please preserve the instructions properly for the future use.

## **Description of Product**

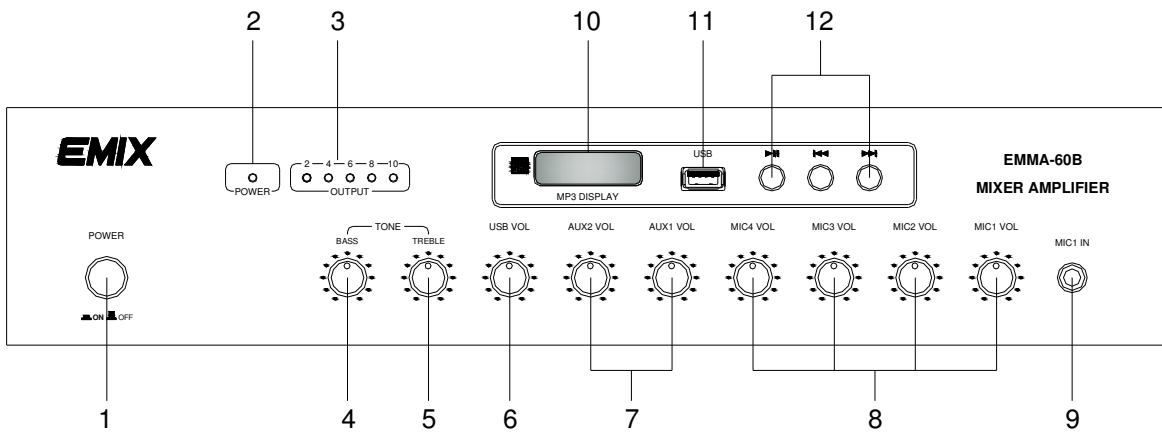
EMMA-60B is advanced public address equipment integrating MP3 player, preamplifier and post power amplifier.

This equipment has two line signal input interfaces, one line signal output interface, and four routes of the microphone input interfaces, of which the signal from the interface of microphone 1# on the front panel shall be granted the highest priority level.

Integrating the whole set of the broadcasting program as the small-sized public address system including the sound source, partition, preamplifier, post power amplifier and volume control and other functions, this equipment is applicable to the sites needing the public address by the small-sized public broadcasting system.

- **Combined power amplifier series with MP3, the preamplifier and post power amplifier.**
- **Plugged with U disc and other memory equipments to provide MP3 sound source.**
- **four microphone inputs, two Line inputs, and one Line output for link.**
- **Muting function.**
- **Individual volume control. Bass and treble tone control.**
- **A five-element LED level meter is provided for the quick and easy visual monitoring of sound level.**

# FRONT PANEL



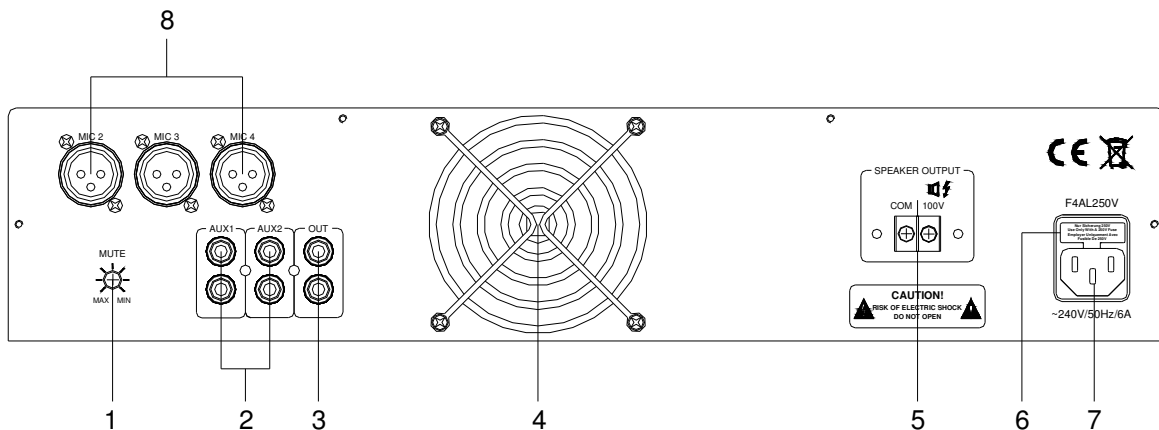
1. Power switch(power indicator lighting as ON state)  
For main power.
2. LED power indicator  
For main power.
3. LED level meter  
Indicate output level.
4. Bass control  
Adjust bass response.
5. Treble control  
Adjust treble response.
6. MP3 output volume control  
Adjust treble response.

7. Line volume control  
Adjust Line input volume.
8. Mic1-Mic4 volume control  
Adjust microphone volume.
9. Mic1 input jack  
Connect to microphone of unbalanced 30-600Ω with 1/4" phone plug. The muting function is activated while the signal is sent to Mic1.
10. MP3 Display
11. MP3 USB input jack
12. MP3 Player control button

## Note:

When all the five elements (+10dB) of the LED level meter remain lit, it indicates that the sound is distorted. In a such case, adjust each volume controlling knob, until LED element 4 (+8dB) and LED element 5 (+10dB) shall flashing.

# REAR PANEL

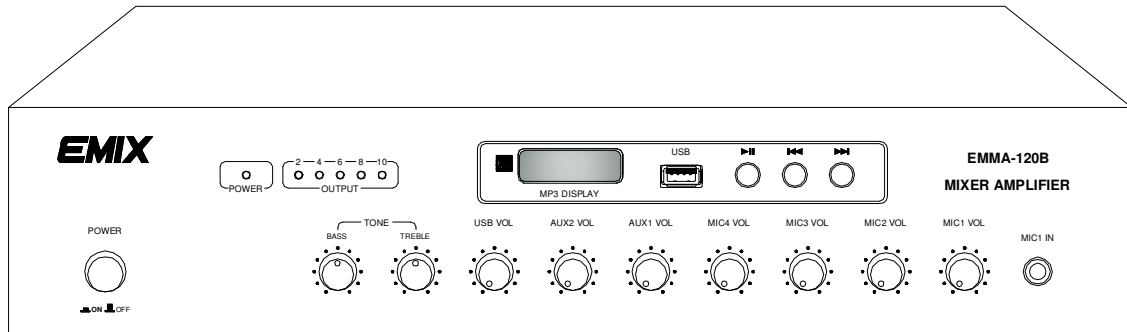




## Public Address System

### MP3 AMPLIFIER

### EMMA-120B MIXER AMPLIFIER



## OWNER'S MANUAL

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For better use of this equipment, please read this manual carefully before use.

## **Message on Information of Instructions**

The instructions contain the introduction to product function, introduction to appearance, technical parameters, schematic diagram of connection, safety precautions, and after-sales service for the broadcasting power amplifier with MP3 /preamplifier in the types of EMMA-120B. It is necessary to read this manual prior to the connection and application.

**The functions and relevant technical parameters described in the instructions shall be applicable as of the completion of development of this product. The functions and technical parameters shall be subject to future change without prior notice.**

Please preserve the instructions properly for the future use.

## **Description of Product**

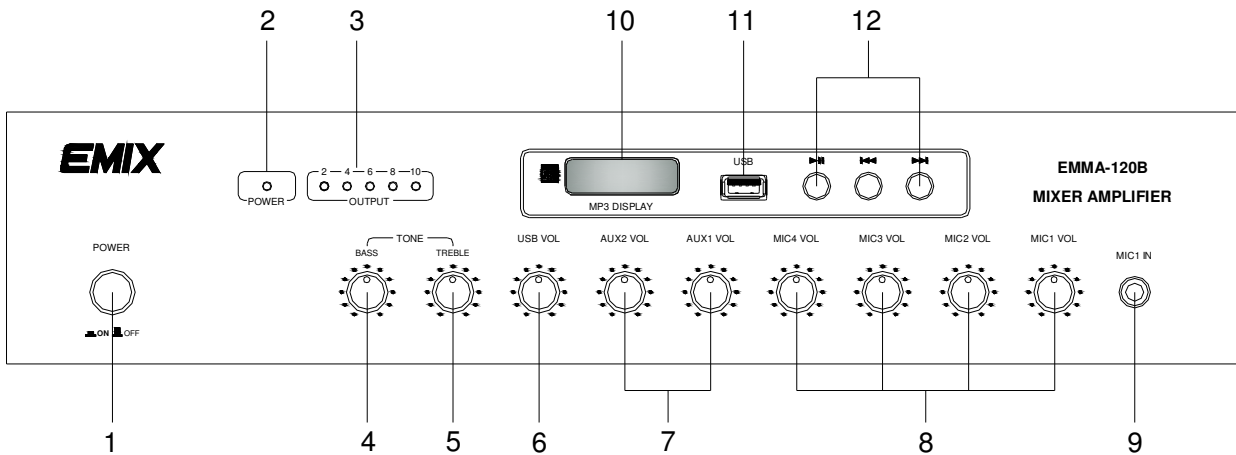
EMMA-120B is advanced public address equipment integrating MP3 player, preamplifier and post power amplifier.

This equipment has two line signal input interfaces, one line signal output interface, and four routes of the microphone input interfaces, of which the signal from the interface of microphone 1# on the front panel shall be granted the highest priority level.

Integrating the whole set of the broadcasting program as the small-sized public address system including the sound source, partition, preamplifier, post power amplifier and volume control and other functions, this equipment is applicable to the sites needing the public address by the small-sized public broadcasting system.

- **Combined power amplifier series with MP3, the preamplifier and post power amplifier.**
- **Plugged with U disc and other memory equipments to provide MP3 sound source.**
- **four microphone inputs, two Line inputs, and one Line output for link.**
- **Muting function.**
- **Individual volume control. Bass and treble tone control.**
- **A five-element LED level meter is provided for the quick and easy visual monitoring of sound level.**

# FRONT PANEL



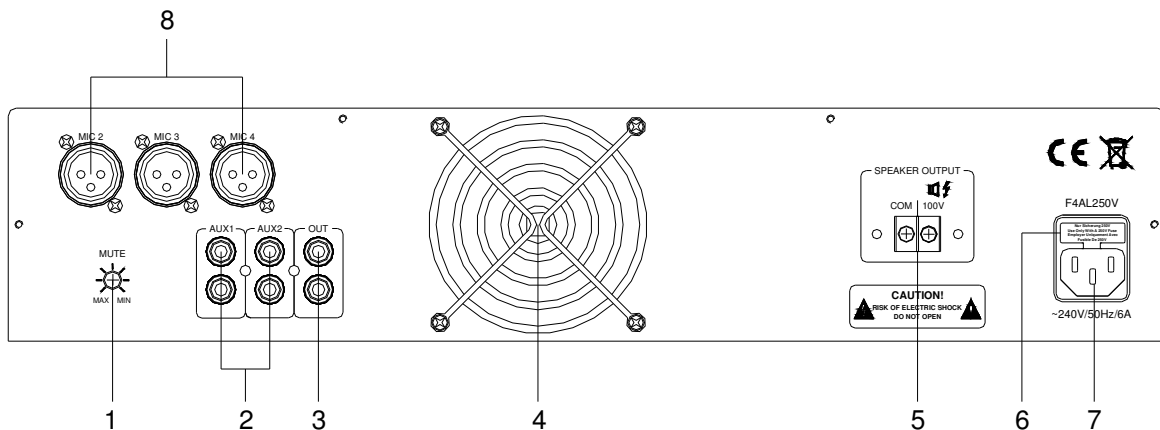
1. Power switch(power indicator lighting as ON state)  
For main power.
2. LED power indicator  
For main power.
3. LED level meter  
Indicate output level.
4. Bass control  
Adjust bass response.
5. Treble control  
Adjust treble response.
6. MP3 output volume control  
Adjust treble response.

7. Line volume control  
Adjust Line input volume.
8. Mic1-Mic4 volume control  
Adjust microphone volume.
9. Mic1 input jack  
Connect to microphone of unbalanced 30-600Ω with 1/4" phone plug. The muting function is activated while the signal is sent to Mic1.
10. MP3 Display
11. MP3 USB input jack
12. MP3 Player control button

## Note:

When all the five elements (+10dB) of the LED level meter remain lit, it indicates that the sound is distorted. In a such case, adjust each volume controlling knob, until LED element 4 (+8dB) and LED element 5 (+10dB) shall flashing.

# REAR PANEL





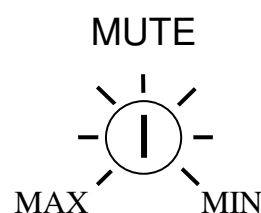
- |   |  |
|---|--|
| <ol style="list-style-type: none"> <li>1. <b>Mute control</b><br/>Adjust muting function.</li> <li>2. <b>Line 1 input and Line 2 input</b><br/>Connect to linear source equipment.</li> <li>3. <b>Line output</b><br/>Connect a recorder</li> <li>4. <b>Fan Exhaust Window</b></li> </ol> | <ol style="list-style-type: none"> <li>5. <b>Speaker output 100V</b></li> <li>6. <b>AC fuse</b><br/>Prevent the excessive AC current flow.</li> <li>7. <b>AC power Input jack</b><br/>Connect to AC power source.</li> <li>8. <b>Mic2-Mic4 input jack</b></li> </ol> |
|---|--|

## Operation Instructions to MP3

plug the U-disc storing MP3 program into USB interface, and the equipment start playing automatically. Make use of the 12 buttons on the panel of the equipment to select the program to be played and to control the suspension of playing.

## Muting Function

This equipment provides muting function. The inputs from **Mic2-Mic4, Line1, Line 2** are automatically muted by a input from **Mic1**, as the signal from **Mic1** overrides other input signals. The level of **MUTE** can be adjusted within the range from MAX to MIN by adjusting **MUTE** control button on the rear panel. It is preset at MAX before shipping from the factory.



## PRECAUTION OF INSTALLATION

- 1 Do not block ventilation holes.
- 2 The amplifier should not be placed in any of the areas:
  - 1) with poor ventilation;
  - 2) exposed to direct sunlight;
  - 3) with high ambient temperature or adjacent to heat-generating equipment;
  - 4) with high humidity or heavy dust;
  - 5) susceptible to vibration.
- 3 Make sure the power outlet conforms to the plug of the unit.
- 4 Do not use this unit if the electrical power cord is frayed or broken.

- 5 Always operate the unit with the AC ground wire connected to the electrical system's ground.
- 6 If an alarm rings after the power has been on and the signal has been fed, there must be an of output short-circuit trouble. In a such case, please turn the power off. Do not turn on the power again, until the trouble shall be resolved.

## Packing List

No.	Specification	Quantity
1	5×19 whole machine fixing screw	4
2	SY542 wire (AV terminal audio wire)	1
3	Instructions	1
4	U disc	1
5	Certificate	1
6	Plastic washer	4

# SPECIFICATIONS

Model	EMMA-120B
Rated output	120W
Output regulation	Less than 3dB
Speaker output	100V
AUX output	1V
Input Sensitivity	Mic1,2,3,4 : 3mV( $\pm 0.5$ mV) unbalanced
	Line 1,2 : 300mV( $\pm 30$ mV) unbalanced
Frequency response	65Hz-20kHz ( $\pm 3$ dB)
Distortion	Less than 1% at 1kHz , 1/3 rated output voltage
The ratio of signal to noise ratio	Mic1 ,2,3,4 : Bigger than 80dB
	Line 1、 2 : Bigger than 80dB
Tone	Bass : $\pm 12$ dB at 100Hz
	Treble : $\pm 12$ dB at 10kHz
MP3 Input Sensitivity	230-280mV
Protection	AC fuse; DC voltage; overload; short-circuit.
Muting function	Mic1 overrides other input signals with 0 ~ -30dB attenuation
Power requirements	AC 220-240V/50-60Hz
Power consumption	200W
Dimensions	430 $\times$ 300 $\times$ 88mm
Gross weight	10kg
Net weight	7kg

Specifications are subject to change without notice

## CAUTION

- When the “Power switcher” is off, please pull out the power cord from the socket. Please keep the equipment out of water.
- To reduce the risk of electric shock, do not remove the cover.
- No user parts inside. Refer servicing to qualified service personnel.

The symbol ⚡ on rear panel indicates hazardous live. The connection of these terminals must be operated by the instructed person. The unit connect to the mains by the plug. Pull out the plug when the unit is in fault or danger status. So the socket for the unit plugging must be set in the place can be easy to plug into and pull out the plug.

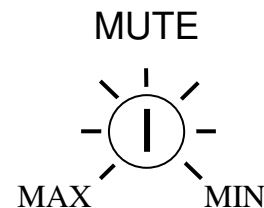
- |   |  |
|---|--|
| <ol style="list-style-type: none"> <li>1. <b>Mute control</b><br/>Adjust muting function.</li> <li>2. <b>Line 1 input and Line 2 input</b><br/>Connect to linear source equipment.</li> <li>3. <b>Line output</b><br/>Connect a recorder</li> <li>4. <b>Fan Exhaust Window</b></li> </ol> | <ol style="list-style-type: none"> <li>5. <b>Speaker output 100V</b></li> <li>6. <b>AC fuse</b><br/>Prevent the excessive AC current flow.</li> <li>7. <b>AC power Input jack</b><br/>Connect to AC power source.</li> <li>8. <b>Mic2-Mic4 input jack</b></li> </ol> |
|---|--|

## Operation Instructions to MP3

plug the U-disc storing MP3 program into USB interface, and the equipment start playing automatically. Make use of the 12 buttons on the panel of the equipment to select the program to be played and to control the suspension of playing.

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3	Instructions	1
4	U disc	1
5	Certificate	1
6	Plastic washer	4

# SPECIFICATIONS

Model	EMMA-60B
Rated output	60W
Output regulation	Less than 3dB
Speaker output	100V
AUX output	1V
Input Sensitivity	Mic1,2,3,4 : 3mV( $\pm 0.5$ mV) unbalanced
	Line 1,2 : 300mV( $\pm 30$ mV) unbalanced
Frequency response	65Hz-20kHz ( $\pm 3$ dB)
Distortion	Less than 1% at 1kHz , 1/3 rated output voltage
The ratio of signal to noise ratio	Mic1 ,2,3,4 : Bigger than 80dB
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Protection	AC fuse; DC voltage; overload; short-circuit.
Muting function	Mic1 overrides other input signals with 0 ~ -30dB attenuation
Power requirements	AC 220-240V/50-60Hz
Power consumption	90W
Dimensions	430 $\times$ 300 $\times$ 88mm
Gross weight	9kg
Net weight	6kg

Specifications are subject to change without notice

## CAUTION

- When the “Power switcher” is off, please pull out the power cord from the socket. Please keep the equipment out of water.
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