



**MA 2X100**

Music Amplifier



User Manual

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### Security Precautions

- ⦿ Carefully **READ** instructions before use.
- ⦿ Amplifier can be operated on either 115 V or 230 V (50-60Hz), which can be selected by changing switch position on the rear panel. The amplifier is factory set to 230 VAC mains voltage.
- ⦿ Keep this user manual nearby for any reference.

### Precaution points and notices

Below-described precaution points and notices are to prevent self injury and property damage. Before operating the amplifier, read this manual first to get known of potential safety hazard and to understand the meaning of the precaution points and notices.

- **DO NOT** install or mount the amplifier on unstable objects, such as on the rickety table or the slanted surface. It may result in the amplifier to fall and cause body injury and/or property damage.
- **Be sure to ground** to the safety ground (earth) terminal to avoid electric shock. Never ground to a gas pipe.
- Use the amplifier only with appropriate voltage specified on the amplifier. Using the voltage higher than specified may cause fire or electric shock.
- **DO NOT** cut, twist, damage, nor modify the power supply cord. In addition, avoid using the power cord close to heaters, and don't place heavy object, including the amplifier itself, on the power cord, for it may cause fire or electric shock.
- **DO NOT** expose the amplifier to rain or the environment where water or other liquids may be splashed, doing this, it may cause fire or electric shock.
- **DO NOT** remove nor plug in the power supply plug with wet hands, for it may cause electric shock.
- Be sure to grasp the power supply plug when unplugging. **DO NOT** pull on the cord itself. Operating the amplifier with damaged power supply cord may cause fire or electric shock.
- **Avoid** installing the amplifier in humid or dusty places, the area exposed to the direct sunlight, locations generating smoke or steam, or the spot near the heaters. It may result in fire or electric shock.
- When moving the amplifier, be sure to remove its power supply cord from the wall outlet. Moving the amplifier with the power cord connected to the outlet may cause damage to the power cord, and resulting in fire or electric shock. When removing the power cord, be sure to grasp its plug to pull.
- **DO NOT** Block the ventilation slots of the amplifier chassis. It will cause the temperature rising and may result fire.

WARNING: THIS APPLIANCE MUST BE EARTHED



## 4 Precautions

- **AC Power Source** The supply transformer has been designed for use on either 115V or 230V, (50-60Hz), selected by a push switch on the rear panel. The amplifier is factory set to 230V mains voltage.
  
- **When using the Amplifier**
  - When following irregular situations are found while using amplifier, immediately switch off the power, disconnect the power supply plug from the AC outlet. Don't try to operate the amplifier again until inspected by local dealer. Contact your local dealer to check the amplifier.
    - ✓ The amplifier falls.
    - ✓ Amplifier is malfunction.
    - ✓ Water or any metallic object gets into the amplifier.
    - ✓ The smoke or strange smell coming from the amplifier.
    - ✓ The power supply cord is damaged, such as exposure of the core, disconnection etc..
  
  - **DO NOT** put cups, bowls, or other containers with liquid or metallic object in it on the top of the amplifier. If accidentally spilled onto the amplifier, it may result fire or electric shock.
  - **DO NOT** touch the power supply plug during thundering and lightning, for it may result electric shock.
  - **DO NOT** insert or drop the metallic objects or flammable materials into the ventilation slots of the amplifier, for it may result fire or electric shock.
  - **DO NOT** open nor remove the amplifier cover to prevent fire or electric shock, for there are high voltage components inside.
  - Make sure that the volume control is turned to minimum position before power is switched on. Loud sound produced at high volume when power is switched on may damage hearing.
  - **DO NOT** place heavy objects on the amplifier, for it may cause it fall and may result in body injury and/or property damage. Besides, the object itself may cause damage or body injury.
  - **DO NOT** operate the amplifier for the extended period of time when sound distortion is heard. It is an indication of malfunction, which may cause heat and result fire.
  - Switch the power off, and unplug the power supply plug from the AC outlet for safety purposes, when cleaning or leaving the amplifier unused for 7 days or more. Fire or electric shock may occur.
  - If the dust accumulates on the power supply plug or on the wall AC outlet, fire may result in. Clean it periodically. In addition, make sure the plug is inserted in the wall outlet securely.
  - Contact your local dealer to clean the dust, if the dust has accumulated in the amplifier for a long period of time. Dust accumulation may result fire or damage.

## Features

- Stereo LED indicator.
- Subwoofer Output
- 3 selectable input sources: CD/AUX/Tape
- 3 MIC Inputs
- Voice priority function on MIC. 1
- Individual MIC input level control
- Record Out
- Overload, over temperature, and speaker short protection.
- Master Bass, treble, and volume control
- AC power in
- 2U height
- 19" rack or table mounted

## Description

MA 2X100 is stereo mixer amplifier designed for subwoofer application. There are 6 input sources: Mic1 ~ Mic3, CD, AUX, and Tape. Each microphone has its own level control. There is selection switch for CD, AUX, and Tape input, and there is one level control for them. Besides, there are bass, treble, and level (volume) controls for the output.

The MIC. 1 has the voice first priority function.

The output power of MA 2X100 is 100W x 2 RMS.

It can connect 8 ohm speaker or high level 100V speaker.

To ensure the amplifier safety, it has speaker short, over temperature, and overload protection.

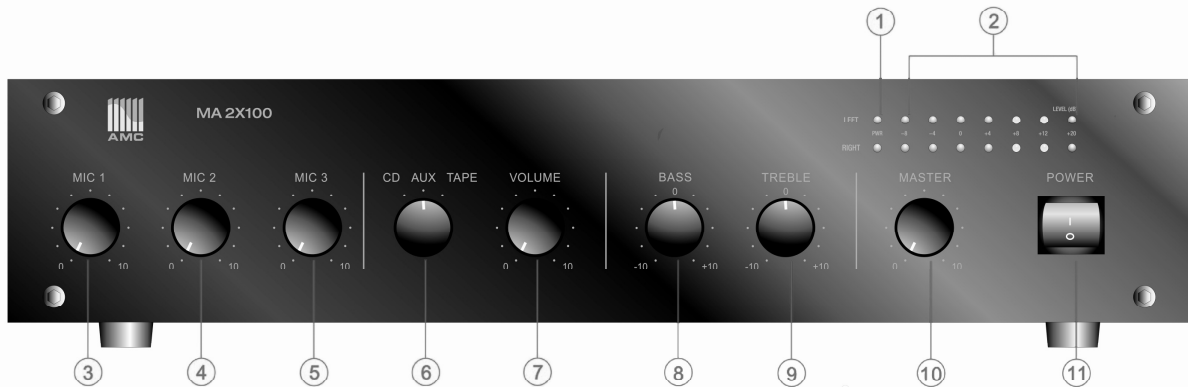
It accepts AC 115V/230V 50/60 Hz.

MA 2X100 is the ideal stereo mixer amplifier for subwoofer application.

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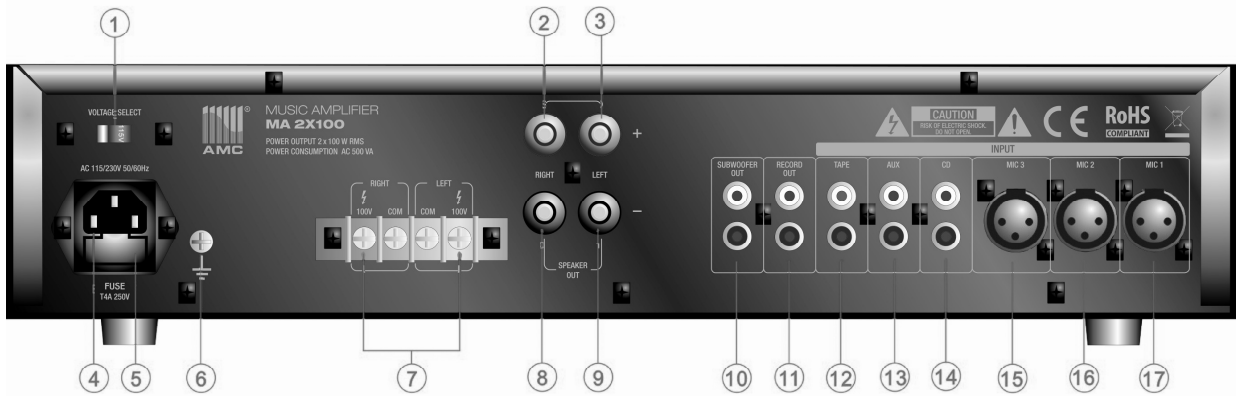
## Controls and connections

### FRONT PANEL DESCRIPTION



1. Power Indicator - LED	7. CD/AUX/Tape Volume Control
2. Level Indicator - LED	8. Bass Control
3. MIC. 1 Volume Control	9. Treble Control
4. MIC. 2 Volume Control	10. Master Volume Control
5. MIC. 3 Volume Control	11. Power Switch
6. CD/AUX/Tape Selection Switch	

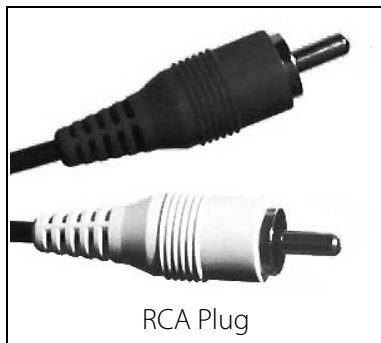
### REAR PANEL DESCRIPTION



1. AC Voltage (115V/230V) Selection Switch	10. Subwoofer Output Jack
2. Speaker Output (Right +) 8 ohm	11. Record Out Jack
3. Speaker Output (Left +) 8 ohm	12. Tape Input Jack
4. AC Power Input Socket	13. AUX Input Jack
5. AC Fuse	14. CD Input Jack
6. Earth Ground Connection Screw	15. MIC 3 Input (XLR)
7. Speaker Output Terminal (High Level 100V)	16. MIC 2 Input (XLR)
8. Speaker Output (Right -) 8 ohm	17. MIC 1 Input (XLR)
9. Speaker Output (Left -) 8 ohm	

### ● Input Connection

The amplifier provides 3 input jacks, which may be used for the connection from other signal sources: CD, AUX, and Tape. Use RCA jack cable to connect corresponding source with the unit. There is a rotary switch at the front panel for the user to select desired input source.



Use XLR plug microphone wire to connect microphone (see above picture), insert it into the XLR socket on the rear panel. All 3 microphones can be used. But only the MIC 1 has voice priority function. It will mute other input sources, when the user begins to speak.

### ● Mute Function

Priority Microphone, Mic1 input has VOX priority over other input source. Note: mute function will be enabled at 0.3mV.

### ● Output Connection

There are 2 pairs of binding posts on the rear panel for the connection of 8 ohm stereo speaker. Pay attention to the correct polarity of the speaker, while connecting.

The subwoofer output jack on the rear is to connect to the subwoofer speaker.

The speaker out screw terminal is for 100V speaker. Pay attention to the polarity, right and left, when connect.

**Note:** 1. Only 8 ohm speaker or 100V speaker can be connected. Don't connect both kinds of speaker.

2. The impedance of 100V speaker is 100 ohm for MA 2X100.

### ● Record Out Connection

Connect "Record Out" jack to the record machine. The "Record Out" signal is @1V.

### Technical Specifications

Model	MA 2X100
Type	Mixer Amplifier
Power Supply	AC 115V/ 230V, 50 / 60Hz $\pm$ 10% Switchable
Output Power:	100W x 2
Total Harmonic Distortion	$\leq$ 0.05% @ 1KHz
Sensitivity	XLR (BALANCED) MIC 1~3 1 mV @ 600 ohm RCA JACK (Unbalanced) CD 200mV @ 20K ohm AUX 200mV @ 20K ohm Tape 200mV @ 20K ohm Record Out @ 1V
Frequency Response	20Hz ~ 20KHz $\pm$ 3dB (8 ohm speaker), 50Hz ~ 18KHz $\pm$ 3dB (High Level 100V speaker)
Output	8 ohm Binding Post, or 100V, 100 ohm (Screw Terminal)
Signal to noise ratio	< 70dB
Damping Factor	>400
Voice Priority Mute	MIC. 1 (enable at 0.3mV)
Protection	Speaker Short Temperature Overload
AC power consumption	500W @ rated power
Dimensions (H x W x D) mm	88 (H) x 425(W) x 305 (D) mm
Weight	9 kg
Mounting	Free standing or 19" rack