

USER MANUAL

QSM-503/QSM-506/QSM-512

Mixer Amplifier



QSM-512





1. Security Precautions

- ◎ Carefully to **READ** the instruction in this manual before use.
- ◎ Certainly to **OBSERVE the INSTRUCTION** in this manual regard convention of safety symbols and messages
- ◎ Please **KEEP** this user **MANUAL** nearby for anytime reference.

Safety symbol and Message Conventions

Below-described safety symbol and messages are to prevent bodily injury and property damage. Before operating the amplifier, read this manual first so you completely knowing the potential safety hazard and understanding the meaning of the safety symbols and messages.

 WARNING	Indicates a potentially hazardous situation, which, if mishandled, could result in death or serious body injury, and/or property damage.
 CAUTION	Indicates a potentially hazardous situation, which, if mishandled, could result in moderate or minor body injury, and/or property damage.



■ When Installing the Amplifier

- **DO NOT** installing or mounting the amplifier in unstable locations, such as on the rickety table or the slanted surface. It may result in the amplifier falling down and causing body injury and/or property damage.
- **Be sure to ground** to the safety ground (earth) terminal to avoid electric shock. Never to ground to a gas pipe for tragic disaster may occur.
- Use the amplifier only with the 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 it may be splashed by water or other liquids, for doing so, it may cause fire or electric shock.

■ When using the Amplifier

- When found following irregular situation during amplifier is in use, immediately switch off the power, disconnect the power supply plug from the AC outlet. Don't try to operate the amplifier again. 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 they spill accidentally into the amplifier, it may result in fire or electric shock.
- **DO NOT** touch the power supply plug during thundering and lightning, for it may result in electric shock.
- **DO NOT** insert or drop the metallic objects or flammable materials into the ventilation slots of the amplifier, for it may result in 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 the amplifier.



■ When Installing the Amplifier

- **DO NOT** remove nor plug in the power supply plug with wet hands, for it may cause electric shock.
- When unplug the power supply cord, be sure to grasp the power supply plug. **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 result in fire.

■ When Using the Amplifier

- 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 impair 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 damaged or body injury.
- **DO NOT** operate the amplifier for the extended period of time with the sound distorting. It is an indication of malfunction, which can cause heat and result in 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 in 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 in fire or damage.

2. Description

QSM-5xx series, including QSM-503, QSM-506, and QSM-512, are economical mixer amplifiers designed for up to 3 microphones plus 3 line-in (CD, AUX, and Tuner), total 6 inputs application.

Each microphone input and line-in input has its own volume control. The microphone inputs are at the front panel. It is convenient for the user to use. Besides, there are 1 Master control of output volume, and 2 tone controls: Bass and Treble.

The output connection covers low impedance 4 ohm and 8 ohm, and high level 70V and 100V screw terminal. Choose only one of these output connections to match the speaker. Furthermore, the amplifier also has one record output for the demand of recording.

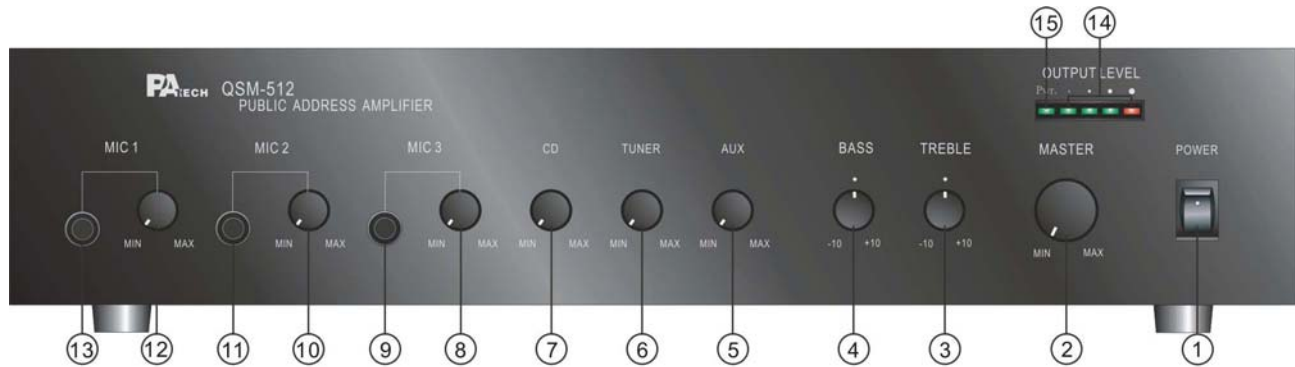
To ensure the amplifier safety, it has speaker short, over temperature, and over load protection.

Besides AC power source, QSM-5xx series mixer amplifier also accept DC 24V input power source from the battery.

QSM-5xx series mixer amplifier is ideal and economic model for the application of multi-input.

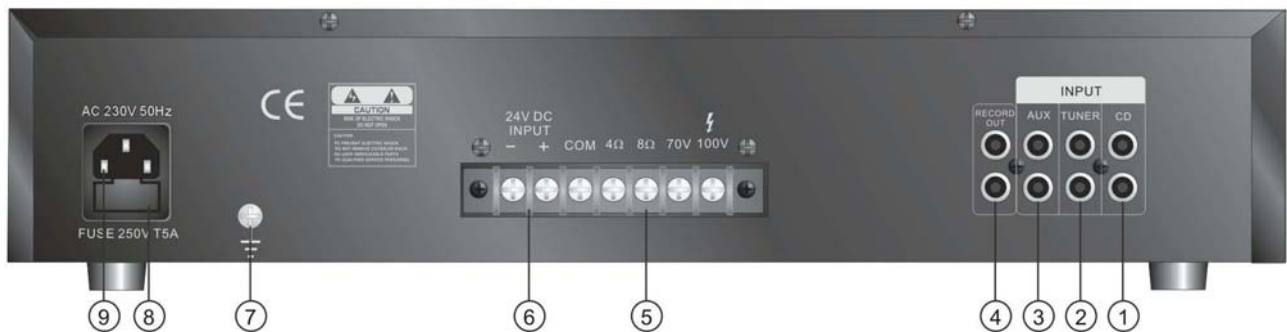
3. Panel Description

FRONT PANEL DESCRIPTION



1. Power Switch	9. Mic. 3 Input
2. Master Volume Control	10. Mic. 2 Volume Control
3. Treble Control	11. Mic. 2 Input
4. Bass Control	12. Mic. 1 Volume Control
5. Aux Volume Control	13. Mic. 1 Input
6. Tuner Volume Control	14. Output Level Indicator
7. CD Volume Control	15. Power Indicator - LED.
8. Mic. 3 Volume Control	

REAR PANEL DESCRIPTION



1. CD Input (RCA Jack)	6. DC Power Supply Terminals
2. Tuner Input (RCA Jack)	7. Grounding Connection Screw
3. Aux Input (RCA Jack)	8. AC Fuse
4. Record Output	9. AC Power Input Socket
5. Speaker Output Terminal	

4. Features

- Multi-input Mixer Amplifier
- Up to 3 microphones
- 3 line-in input sources: CD, AUX, and Tuner
- Individual volume control of each input
- Master volume, Bass, and Treble control for the output.
- Over load, over temperature, and speaker short protection.
- 4 ohm, 8 ohm, 70V and 100V output
- Record output
- AC or DC power in
- 2U height
- 19" rack or table mounted

5. Power Source

- **AC Power Source**

The supply transformer has been designed for use AC 230V($\pm 10\%$) 50 Hz.

- **DC Power Source**

Battery Connection (24Vdc)

When using external batteries, ground the amplifier via the screw terminal. (Electrical stability of the system will be improved by providing a good earth ground.) When connecting batteries, please ensure correct polarity.

6. Connection

- **Microphone Connection**

Mic1~3 inputs are RCA jack..

- **CD, Aux, and Tuner Connection (Input)**

The equipment provides 3 auxiliary inputs, which are CD source, auxiliary input, and tuner source. All are dual RCA jack and has a stereo to mono converter.



PIN SLEEVE
RCA plug connector

- **Output Connection**

The output terminal is on the rear panel. The terminal connection can connect low impedance 4 ohm or 8 ohm, or high-level 70V or 100V speaker. Use only one of these output connections for corresponding speaker.

- **Record Output Connection**

If there is the demand of recording, connect the input of the recorder to the record output on the rear panel of the amplifier.

7. Operation

After all connections are completed, and turn master volume control at proper position (not at maximum position). And then turn all line-in input volume controls at proper position. Then, switch on the power switch. If necessary, turn the bass, treble, and volume control to what you desire.

Before using the microphone, make sure the corresponding volume control of MIC is at proper position (not at maximum position). If necessary, adjust the volume further.

8. Technical Specification

Type	Mixer Amplifier		
Model	QSM-503	QSM-506	QSM-512
Output Power:	30W	60W	120W
Supply	Main Voltage	AC 115V or 230V 50/60Hz	
	Battery Voltage	DC 24V	
Outputs	4Ω, 8Ω, 70V, 100V		
Record Output	1V@100Ω		
Frequency Response	50Hz ~ 15KHz ± 3dB		
Inputs Impedance	Mic 1~3: 1.5mV, 600Ω unbalanced. CD/Aux/Tuner: 200mV @ 10K Hz unbalanced		
Input Sensitivity	Mic 1~3: 1.5mV CD/Aux/Tuner: 200mV		
Mute Priority	Mic 1		
Tone Controls	Bass : 100Hz ± 10dB Treble : 10KHz ± 10dB		
Total Harmonic Distortion	< 0.1% @ 1KHz, rated power		
Signal to Noise Ratio	> 80dB		
AC Power Consumption	80W	160W	320W
DC Power Consumption	2.5A	5A	10A
Dimensions (HxWxD) mm	88 (H) x 425 (W) x 275 (D) mm		
Weight	6 Kgs	8 Kgs	10 Kgs
Mounting options	Table top or 19" rack mountable		

WARNING: THIS APPLIANCE MUST BE EARTHED

