# **USER MANUAL**

## **QSM-6505A**

## **Distribution Mixer Amplifier**





## 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.
- O 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.
<b>A</b> 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, it the dust has accumulated in the amplifier for a long period of time. Dust accumulation may result in fire or damage.

## 2. Description

QSM-6505A is the mixer amplifier designed for up to 5 channels (zones) application. Each channel output is 50W RMS. And each one has its own bass, treble, and level (volume) control. There are 6 input sources: Aux 1 ~ 4, and 2 "High Level" inputs. "High Level" input is for the connection from the output of other amplifier, no matter it is 8 ohm, 70V, or 100V.

The front MIC. 1 input has the voice priority function with level control. Each channel has one push switch to select to mute its own signal source or not.

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

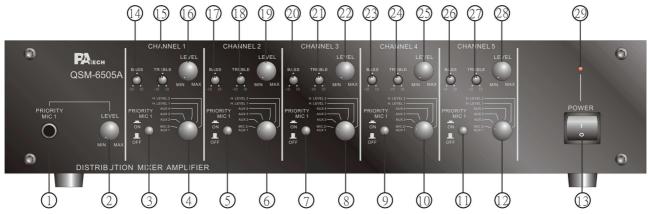
The output connection is 8 ohm, 70V, and 100V screw terminal.

It accepts AC 115V/230V 50/60 Hz and DC 24V input.

QSM-6505A is the ideal mixer amplifier for multi-zone with multi sources.

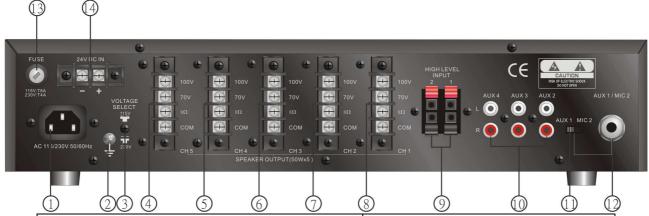
## 3. Panel Description

## **FRONT PANEL DESCRIPTION**



1. MIC. 1 Input	16. Channel 1 Volume Control
2. MIC. 1 Volume Control	17. Channel 2 Bass Control
3. Channel 1 Mute Priority Switch	18. Channel 2 Treble Control
4. Channel 1 Input Source Selection Switch	19. Channel 2 Volume Control
5. Channel 2 Mute Priority Switch	20. Channel 3 Bass Control
6. Channel 2 Input Source Selection Switch	21. Channel 3 Treble Control
7. Channel 3 Mute Priority Switch	22. Channel 3 Volume Control
8. Channel 3 Input Source Selection Switch	23. Channel 4 Bass Control
9. Channel 4 Mute Priority Switch	24. Channel 4 Treble Control
10. Channel 4 Input Source Selection Switch	25. Channel 4 Volume Control
11. Channel 5 Mute Priority Switch	26. Channel 5 Bass Control
12. Channel 5 Input Source Selection Switch	27. Channel 5 Treble Control
13. Power Switch	28. Channel 5 Volume Control
14. Channel 1 Bass Control	29. Power Indicator - LED
15. Channel 1 Treble Control	

### **REAR PANEL DESCRIPTION**



1. AC Power Input Socket	8. Channel 1 Output Terminal
2. Earth Ground Connection Screw	9. "High Level" Input Terminal
3. AC Voltage (115V/230V) Selection Switch	10. Aux 2 ~ 4 Input (RCA Jack)
4. Channel 5 Output Terminal	11. Aux 1/MIC 2 Selection Switch
5. Channel 4 Output Terminal	12. Aux 1/MIC 2 Input
6. Channel 3 Output Terminal	13. AC Fuse
7. Channel 2 Output Terminal	14. DC Power Supply Terminals

### 4. Features

- Up to 5 channels (zone)
- 6 selectable input sources + MIC 1 (First Priority)
- 2 "High Level" input (included in 6 selectable input source).
- Bass, treble, and volume control for each channel
- Voice priority function on MIC. 1
- Overload, over temperature, and speaker short protection.
- 8 ohm, 70V, and 100V output
- AC and DC power in
- 2U height
- 19" rack or table mounted

#### 5. Power Source

#### 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 at 230Vac mains voltage.

#### DC Power Source

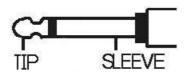
#### **Battery Connection (24Vdc)**

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

Mic1~2 inputs are unbalanced standard 1/4" Phone Jack.

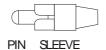


#### **Mute Function**

Priority Microphone, Mic1 input has VOX priority over CH 1~5. Press the push switch of each channel on the front panel to mute the corresponding signal source.

## **Aux Connection (Input)**

The equipment provides 4 auxiliary input which may be used for connecting other signal sources such as a Radio Tuner, CD or Cassette player. A slide switch is located near by AUX1/MIC 2 on the rear panel for selection of Mic2 or Aux1. Aux 2 ~ 4 inputs are a dual RCA jack and has a stereo to mono converter for each channel



RCA plug connector

## High Level Input Connection

The "High Level" terminal is for connecting the signal sources from other amplifier output, which is normally connected to the speaker.

## Output Connection

There are 5 output terminals on the rear panel. Each terminal has 3 speaker outputs: 8 ohm, 70V and 100V. Use only one of these outputs for connection.

## 7. Operation

After all connections are completed, turn the Input Source Selection Switch of each channel to set on the corresponding position for the signal source. If necessary, turn the bass, treble, and volume control to what you desire.

Before using the microphone 1 on the front panel to broadcast, make sure the level (volume) control of MIC 1 is at proper position (not at maximum position). Set the push switch of each channel to control the mute function of its own channel signal source. Switch-down is to mute signal source, only the voice from MIC 1 can be heard, while switch-up does not mute signal source, both voice from MIC 1 and channel signal can be heard. If necessary to adjust the volume further, turn the level control of MIC 1 and/or of Channel 1 ~ 5.

## 8. Technical Specification

Model		QSM-6505A
Туре		Distribution Mixer Amplifier
Supply	Mains Voltage	AC 115V/ 230V, 50 / 60Hz ± 10%
		Switchable
	Battery	DC 24V (MAX 10% deviation)
	Voltage	
Output Power:		50W x 5
Total Harmonic Distortion		<= 0.1% @ 1KHz, rated power
Sensitivity		1/4" PHONE JACK (UNBALANCED)
		MIC 1~2 1 mV @ 600 ohm
		AUX 1 200mV @ 20K ohm
		RCA JACK (UNBALANCED)
		AUX 2 200mV @ 20K ohm
		AUX 3 200mV @ 20K ohm
		AUX 4 200mV @ 20K ohm
		SPEAKER JACK (UNBALANCED)
		HI LEVEL 100V @ 300 ohm
Frequency Response		50Hz ~ 15KHz ± 3dB
Output		100V, 70V, 8 ohm; screw terminal
Signal to noise ratio		< 70dB
Damping Factor		>200
Voice Priority Mute		MIC. 1
Protection		Speaker Short
		Temperature
		Overload
AC power consumption		640W @ rated power
DC power consumption		15A @ rated power
Dimensions ( H x W x D )mm		88 (H) x 425(W) x 345 (D) mm
Weight		15 kgs
Mounting		Free standing or 19" rack

WARNING: THIS APPLIANCE MUST BE EARTHED

