



M SERIES

Touring Installation Amplifiers



Operation Manual

Important Safety Precautions & Explanation of Symbols



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 humans.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in this manual.



The lightning flashes printed next to the output terminals of the amplifier are intended to alert the user to the risk of hazardous energy. Output connectors that could pose a risk are marked with the lightning flash. Do not touch output terminals while amplifier power is on. Make all connections with amplifier turned off.



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE THE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSON NEL.



WARNING: To prevent fire or electric shock, do not expose this equipment to rain or moisture.



Do not put any containers that hold water on the amplifier, just in case the water would drip into the amplifier and cause electric shock.



User is responsible to choose matched speaker for the amplifier so as to avoid damage to speaker. We are not responsible if the speaker was damaged. Please consult to speaker factory for details.

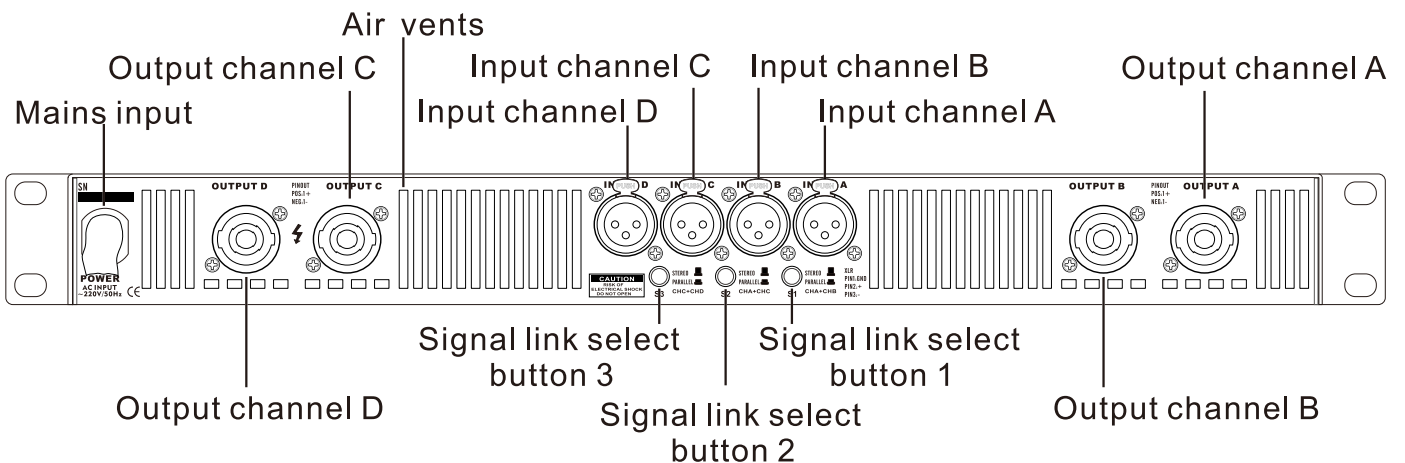
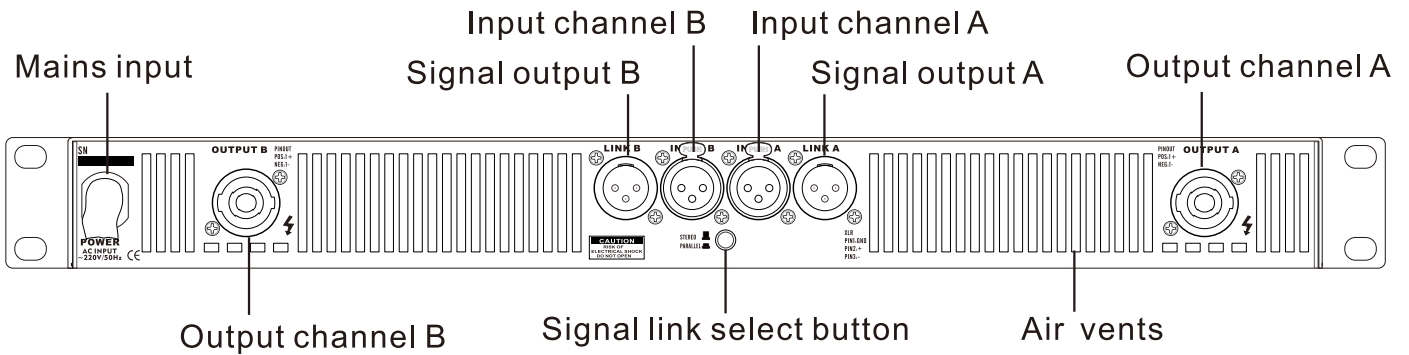
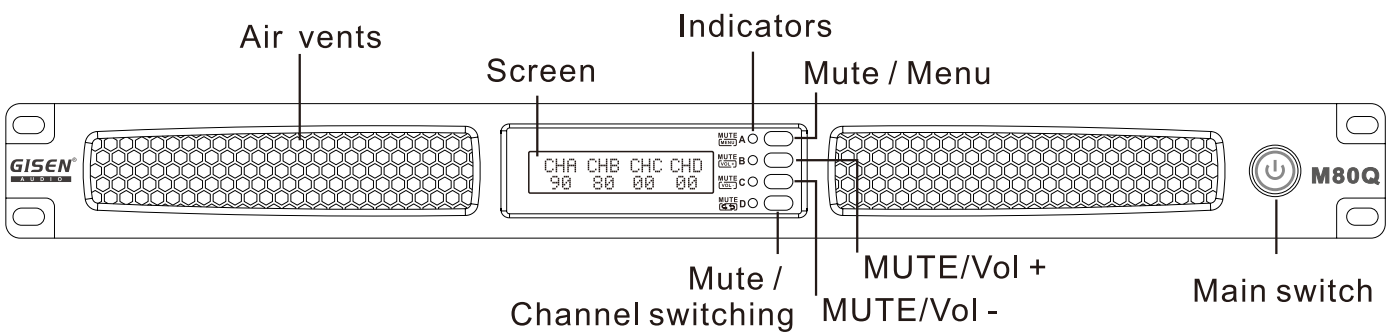
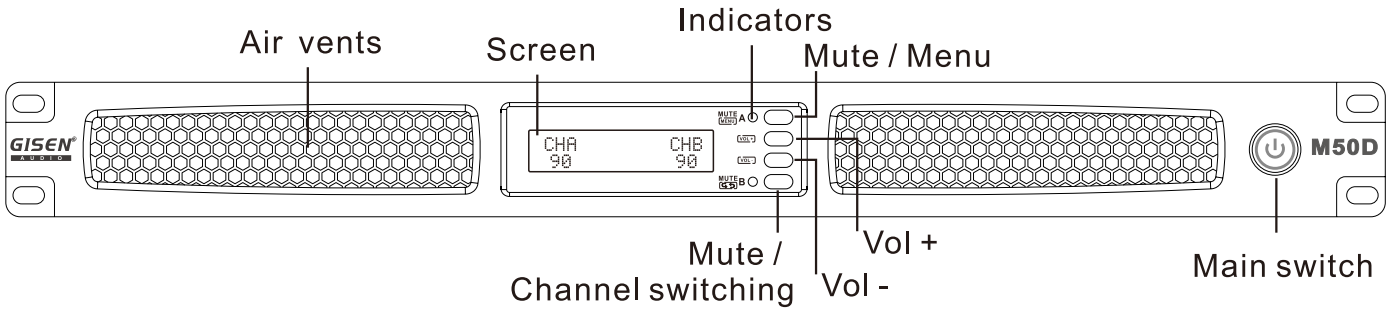
This amplifier has a serial number located on the rear panel. Please write this and the model number down and keep them for your records. Keep your purchase receipt. It is your proof of purchase.

Serial Number: _____

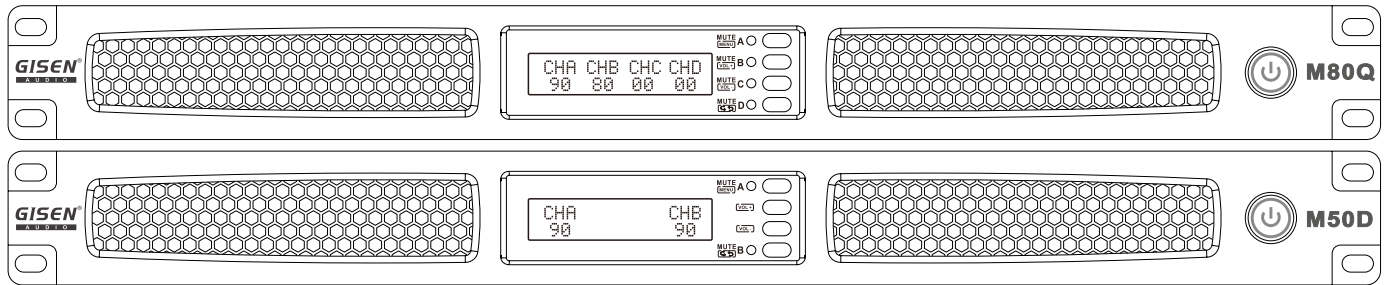
Date of Purchase: _____

Purchased From: _____

CONTROL, CONNECTORS & FUNCTIONS



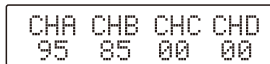
Front panel



1. Power switch

- a. The light is on when the amp is turned on;
- b. The light is off when the amp is turned off.

2. Screen



- a. It's on when the amp is turned on, it's off when the amp is turned off;
- b. Volume display 0-95dB.

3. Indicators



Each channel LED is with red and green indication, the functions is as follow:

- a. Power on, no LED on– it means there is no signal input;
- b. Power on, red LED on– (i) The amp was selected to mute in the previous operation, and the screen shows “00”
(ii) The boot protection starts, and the red LED will disappear after 5-6 seconds, screen shows the value same as previous operation.

4. Features

- a. Digital volume– it can prevent interruption effectively, and no more noise coming from long-time used potentiometers.
- b. Volumes goes up gradually– each channel volumes shows “00” when the amp is turned on, after 4-5 seconds, the volume will go back to the previous setting gradually. Likewise, if you mute the channel, when cancel mute, the volume will go back gradually.
- c. Power-off memory– The setting will be automatically saved when the amp is turned off. When you turn on the amp again, the amp will get the same setting as previous.

Front panel

5. Buttons

There is one button for each channel, and each button is with two functions, which is as follows: (2-channel amp has no channel C&D)

MUTE
(MENU) A ○ 

- a. Mute: shortly press it once, channel A is mute, LED A turns red and screen shows "00". Press it again, mute goes off, volume goes back to previous setting and red LED is off.
- b. Menu: keep pressing it for 1.5 seconds, it will get in menu display. At this time, CHA LED blinks, it means you can adjust its volume. You can switch channel by pressing **MUTE**
(↔) D adjust volume by pressing **MUTE**
(VOL+) B and **MUTE**
(VOL-) C .
Please refer to the next instructions of button CHB. The amp will go back to mute control after 5 seconds idle.



MUTE
(VOL+) B ○ 

- a. Mute: shortly press it once, channel B is mute, LED B turns red and screen shows "00". Press it again, mute goes off, volume goes back to previous setting and red LED is off.
- b. VOL+: when the amp is in volume display, you can press it to increase volume, the highest is "95". The setting will be saved and go back to mute control after 5 seconds idle.

MUTE
(VOL-) C ○ 

- a. Mute: shortly press it once, channel C is mute, LED C turns red and screen shows "00". Press it again, mute goes off, volume goes back to previous setting and red LED is off.
- b. VOL-: when the amp is in volume display, you can press it to decrease volume, the lowest is "00". The setting will be saved and go back to mute control after 5 seconds idle.

MUTE
(↔) D ○ 

- a. Mute: shortly press it once, channel D is mute, LED D turns red and screen shows "00". Press it again, mute goes off, volume goes back to previous setting and red LED is off.
- b.  Channel switching: when the amp is in volume display, you can switch channel by pressing  if there is no operation the setting will be saved and the amp will go back to mute control after 5 seconds idle.

Rear panel

Stereo, Parallel mode

The amp can be set to stereo or parallel input mode.

1. The 2-channel amplifier can be chosen to use 1 or 2 input signal as required, the detailed operation is as below:
A/ B channel parallel- press S1 button, Channel A signal feeds both channel A and B.
2. The 4-channel amplifier can be chosen to use 1 or more signal as required, the detailed operation is as below:
 - a. A/B channel parallel- press S1 button, Channel A signal feeds channel A & B. Channel C/D has independent signal.
 - b. A/C channel parallel- press S2 button, Channel A signal feeds channel A & C. Channel B/D has independent signal.
 - c. C/D channel parallel- press S3 button, Channel C signal feeds channel C & D. Channel A/B has independent signal.
 - d. A/B/C channel parallel- press S1 & S2 button, Channel A signal feeds channel A, B & C. Channel D has independent signal.
 - e. A/C/D channel parallel- press S2 & S3 button, Channel A signal feeds channel A, C & D. Channel B has independent signal.
 - f. A/B/C/D channel parallel- press S1, S2 & S3 button, Channel A signal feeds channel A, B, C & D.

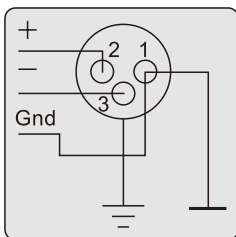


Each channel is equipped with a balanced 3-pin input connector. It requires to use a standard cable and can be switched fast. Balanced input connectors are recommended so as to reduce AC hum and interruption, especially when using long cable. Unbalanced connection should be used in circumstance when with short cable, and the signal resistance should be no more than 600 ohms.

XLR INPUT

1. Balanced input connection
 - a. The XLR input connectors are electronically balanced;
 - b. XLR input connectors should be wired as follows:

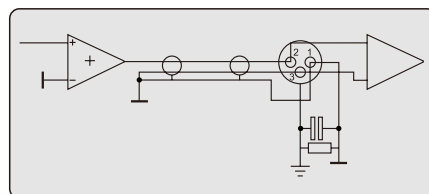
Pin1	Ground/shield
Pin2	Hot (+)
Pin3	Cold(-)



2. Unbalanced input connection

To connect an input to an unbalanced source, it is possible to connect pins 1 and 3 in the XLR plug at the amplifier end of the cable. However, a better method is to connect pin 3 to the shield at the source end of the cable, as this usually results in better hum and noise rejection.

Balanced input connections are recommended whenever possible.



- The M series amplifier do not have bridge mode, and can not work under 4 ohms.
- Do not support hot-plugging. Make sure the power switch is off before attempting to make any input or output connections.

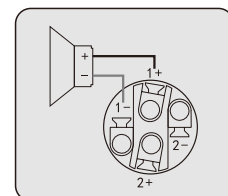
SPEAKER OUTPUT

Each channel accepts normal 2-wire cable.

.Stereo or parallel mode- connects each speaker to amplifier channel accordingly.

.Mode can be chosen by pressing its button at the rear panel.

.Please refer to the photo for the connections.



OUTPUT TERMINAL SAFETY WARNING! Do not touch output terminals while amplifier power is on. Make all connections with amplifier turned off. Risk of hazardous energy!

Specificatins

Model	M20D	M30D	M40D	M50D	M60D	M70D
8 ohms Stereo Power	2x650W	2x900W	2x1300W	2x1500W	2x1800W	2x2100W
4 ohms Stereo Power	2x1300W	2x1800W	2x2600W	2x3000W	2x3600W	2x4200W
Input connector	3- pin XLR					
Input impedance	20K ohms balanced					
Input Sensitivity	0.775V					
Channel separation (Cross talk)	>70dB@1KHz					
Output connector	Neutrik Speakon					
Hum&Noise	>112dB					
Damping Factor	> 400 @ 8Ω					
THD	<0.1% (20Hz-20kHz 1W)					
Frequency Response	20Hz - 34KHz,(+0/-0.3dB, 1W, 8ohms)					
Level adjustment	Electronic volume control					
Cooling	Temperature controlled speed, front-to-rear airflow					
Protection	Short circuit, open circuit, direct current voltage, overheat, overload, radio frequency protection					
Power Requirement	AC 180-240V(90V-120V) 50-60Hz					
Amplifier dimensions	47mmX482mmX488mm					
Packing dimensions	80mmX580mm×550mm					
Net weight(kg)	9.5					
Gross weight(kg)	11.5					

Model	M40Q	M60Q	M80Q	M100Q
8 ohms Stereo Power	4x650W	4x900W	4x1300W	4x1500W
4 ohms Stereo Power	4x1300W	4x1800W	4x2600W	4x3000W
Input connector	3- pin XLR			
Input impedance	20K ohms balanced			
Input Sensitivity	0.775V			
Channel separation (Cross talk)	>70dB@1KHz			
Output connector	Neutrik Speakon			
Hum&Noise	>112dB			
Damping Factor	> 400 @ 8Ω			
THD	<0.1% (20Hz-20kHz 1W)			
Frequency Response	20Hz - 34KHz,(+0/-0.3dB, 1W, 8ohms)			
Level adjustment	Electronic volume control			
Cooling	Temperature controlled speed, front-to-rear airflow			
Protection	Short circuit, open circuit, direct current voltage, overheat, overload, radio frequency protection			
Power Requirement	AC 180-240V(90V-120V) 50-60Hz			
Amplifier dimensions	47mmX482mmX488mm			
Packing dimensions	80mmX580mm×550mm			
Net weight(kg)	10.5			
Gross weight(kg)	12.5			

