



M series Professional power amplifier user 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.

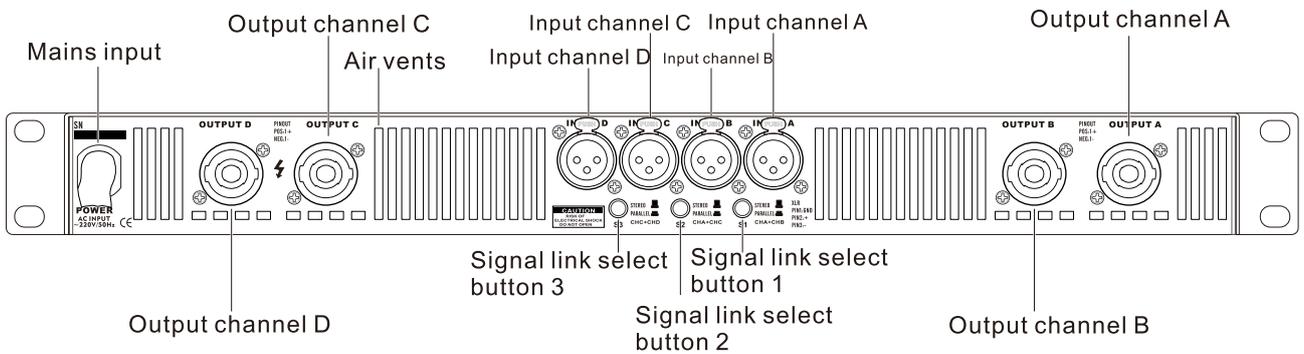
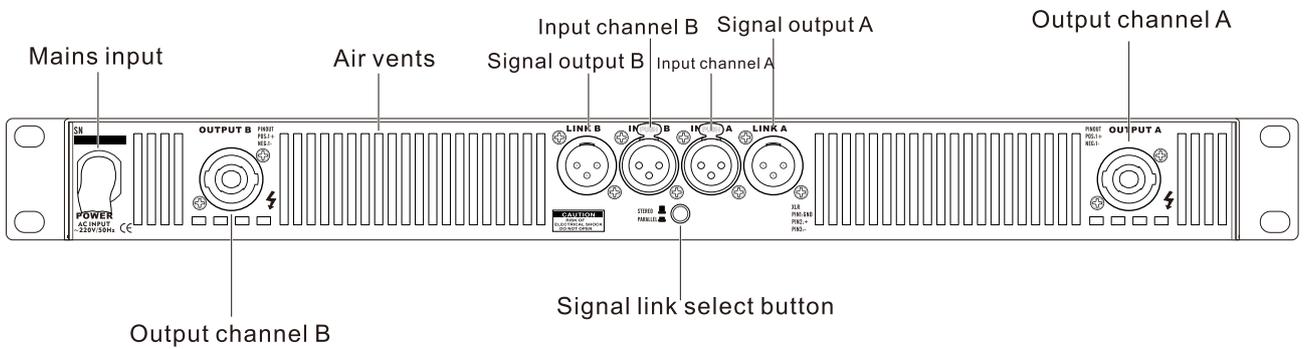
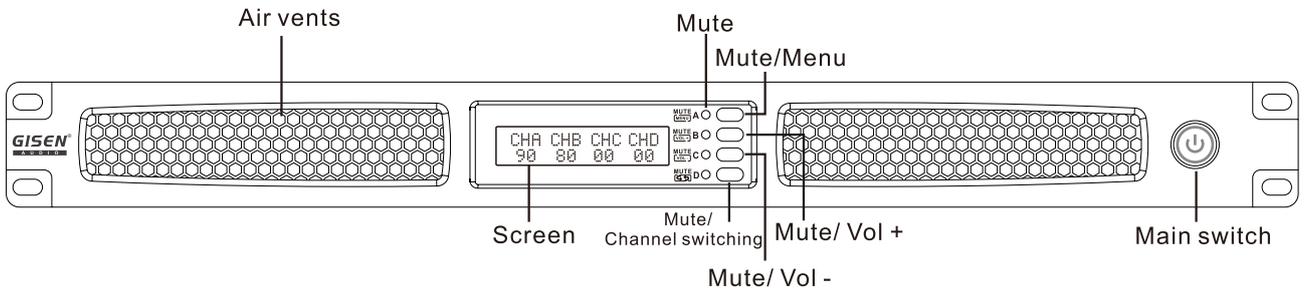
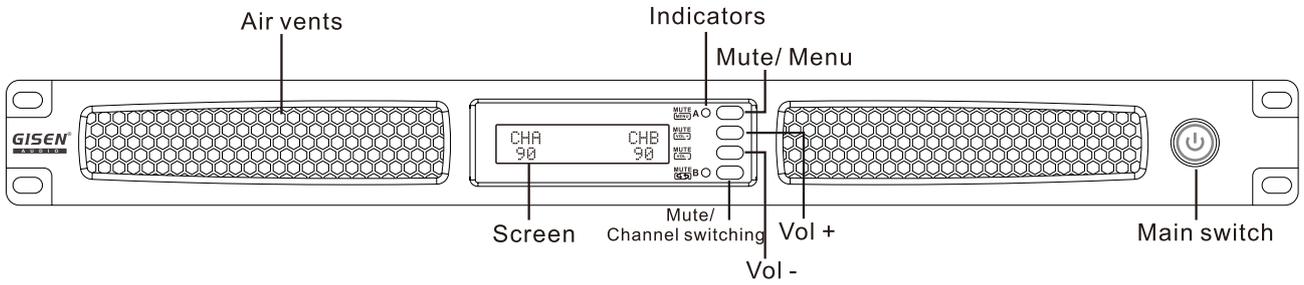
This amplifier has a serial number located on the rear panel.
Please write this and the model number down and keep them for your records.
Keep your purchase receipt. It is your proof of purchase.

Serial Number: _____

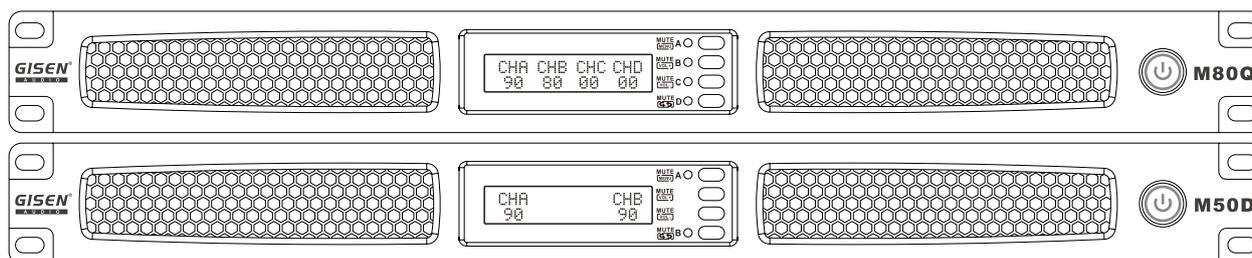
Date of Purchase: _____

Purchased From: _____

CONTROL, CONNECTORS & FUNCTIONS



Front panel



1. Power switch

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

2. Screen



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

3. Indicators



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

- Power on, no LED on- it means there is no signal input;
- Power on, red LED on- it means (i) The amplifier was selected to mute mode 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;
- Green LED on- it means there is signal input, the green is brighter, the signal is stronger;
- LED from green to blinking red- it means signal is too strong, VPL is working;
- Red LED on- it means (i) the amplifier is selected to mute, and the screen shows "00";
(ii) channel mute for protection;

4. Buttons

There is one button for every channel, and each button got two functions, which is as follows:

(The 2-channel amplifier has no button C&D.)

-   a. Mute: shortly press it once, channel A is mute, LED A turns red and screen shows "00". Press again, mute is off, volume is back and red LED disappears.
b. Menu: long press it for 1.5 second, it will get in the menu display. At this time, CHA led blinks, it means you can adjust its volume. You can switch channel by pressing  , adjust volume by pressing  and . Please refer to the next instructions of button CHB. The amp will automatically saves the setting and go back to mute control function after 5 seconds idle.
-   a. Mute: shortly press it once, channel B is mute, LED B turns red and screen shows "00". Press again, mute is off, volume is back and red LED disappears.
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 function after 5 seconds idle.
-   a. Mute: shortly press it once, channel C is mute, LED C turns red and screen shows "00". Press again, mute is off, volume is back and red LED disappears.
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 function after 5 seconds idle.
-   a. Mute: shortly press it once, channel D is mute, LED D turns red and screen shows "00". Press again, mute is off, volume is back and red LED disappears.
b. channel switching: when the amp is in volume display, you can switch channel by pressing   . If there no operation or stop operating, the setting will be saved and the amp will go back to mute control function after 5 seconds idle.

5. Features

- Digital volume- it can prevent interruption effectively, and no more noise coming from long-time used potentiometers.
- Volume goes up gradually- each channel volume 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 you cancel mute, the volume will go back to previous setting gradually.
- Power-off memory- The setting will be automatically saved when the amp is turned off.
When you turn the amp on, the amp will have the same setting as previous.

Rear panel

Stereo, Parallel mode

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

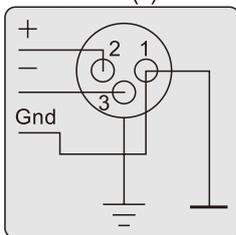
1. The 2-channel amplifier can be chosen to use 1 or 2 input signal as required, the detailed operation is as below:
 - A/ B channel parallel- press S1 button, Channel A signal feeds both channel A and B.
2. The 4-channel amplifier can be chosen to use 1 or more signal as required, the detailed operation 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 connections 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.

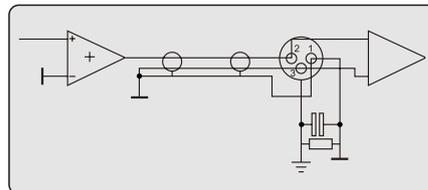
XLR INPUT

1. Balanced input connection
 - a. The XLR input connectors are electronically balanced;
 - b. XLR input connectors should be wired as follows:
 - Pin 1 Ground/shield
 - Pin 2 Hot (+)
 - Pin 3 Cold (-)



2. Unbalanced input connection

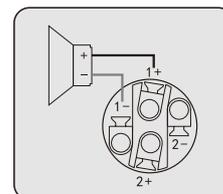
To connect an input to an unbalanced source, it is possible to connect pins 1 and 3 in the XLR plug at the amplifier end of the cable. However, a better method is to connect pin 3 to the shield at the source end of the cable, as this usually results in better hum and noise rejection. Balanced input connections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

SPEAKON 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!

Specifications

Model	M20D	M30D	M40D	M50D	M60D	M70D
8 ohm stereo power	2X650W	2X900W	2X1300W	2X1500W	2X1800W	2X2100W
4 ohm stereo power	2X1300W	2X1800W	2X2600W	2X3000W	2X3600W	2X4200W
Input connector	3-pin XLR					
Input impedance	20K ohm balanced					
Input sensitivity	1.2V					
Channel separation (cross talk)	>70dB@1kHz					
Output connector	Neutrik speakon					
Hum & Noise	-112dB					
Damping factor	>1000 @8 ohm					
THD	<0.1% (20Hz-20kHz, 1W)					
Frequency response	20Hz-20kHz (+-0.3dB)@1W, 8 ohm					
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, ultralow frequency protection					
Power requirement	ACV 180-240V(90V-120V), 50-60Hz					
Amplifier dimension	47x488x448mm					
Carton dimension	100x640x590mm					
Net weight (kg)	10.6					
Gross weight (kg)	13.5					

Model	M40Q	M60Q	M80Q
8 ohm stereo power	4X650W	4X900W	4X1300W
4 ohm stereo power	4X1300W	4X1800W	4X2600W
Input connector	3-pin XLR		
Input impedance	20K ohm balanced		
Input sensitivity	1.2V		
Channel separation (cross talk)	>70dB@1kHz		
Output connector	Neutrik speakon		
Hum & Noise	-112dB		
Damping factor	>1000 @8 ohm		
THD	<0.1% (20Hz-20kHz, 1W)		
Frequency response	20Hz-20kHz (+-0.3dB)@1W, 8 ohm		
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, ultralow frequency protection		
Power requirement	ACV 180-240V(90V-120V), 50-60Hz		
Amplifier dimension	47x488x448mm		
Carton dimension	100x640x590mm		
Net weight (kg)	12.2		
Gross weight (kg)	15		