



Power Amplifier for PA Conference System

MP6906

MP6912

MP6925

MP6935



Operation Manual

Welcome to enter DSPPA PA system. Please read the manual carefully before use to facilitate your better application of the equipment.

DSPPA Acoustic Technology Co., Ltd.

<http://www.DSPPA.com>

contents

1. General Description	3
1.1 About Power Amplifier of PA Conference System	3
1.2 Performance Features	3
2. Brief Description of Product	4
2.1 Description of Front Panel.....	4
2.2 Description of Rear Panel.....	5
3. Operation Instructions.....	6
3.1 Example of System Connection	6
3.2 Example of Sound Box Connection	7
3.3 Adjustment Operation of Equalizer.....	8
3.4 Description of Channel Selection.....	8
3.5 Description of Volume Control.....	8
3.6 Microphone and Priority Function	9
4. Precautions for Operation.....	9
4.1 Precautions for Safety Operation.....	9
4.2 Precautions for After-sales Service.....	10
5. Packing List	11
6. Performance Specifications	11

1. General Description

1.1 About Power Amplifier of PA Conference System

MP69 series power amplifiers are a type of PA conference devices that integrate the equalizing function, frequency shift function, front and back stage amplification function. The products provide 4 audio source input ports, 6 microphone input ports, a line output port and 4 power amplifier's output terminals, etc. Among them, you can select one audio input from 4 channel audio input ports and control it's volume. The volume of the 6 microphones can be controlled independently. A master-volume control is provided for controlling the total output volume. The 7-band equalizers (EQ) have been provided to adjust the output. The shifted frequency of microphones is 0-5Hz higher than the original frequency.

MP69 series products have rated voltage outputs of 100 V, 70 V, and rated resistance outputs of 4 Ω , 8 Ω , 16 Ω . They are divided into four kinds of power model 60 W(MP6906), 120 W(MP6912), 250 W(6925) and 350 W(6935).

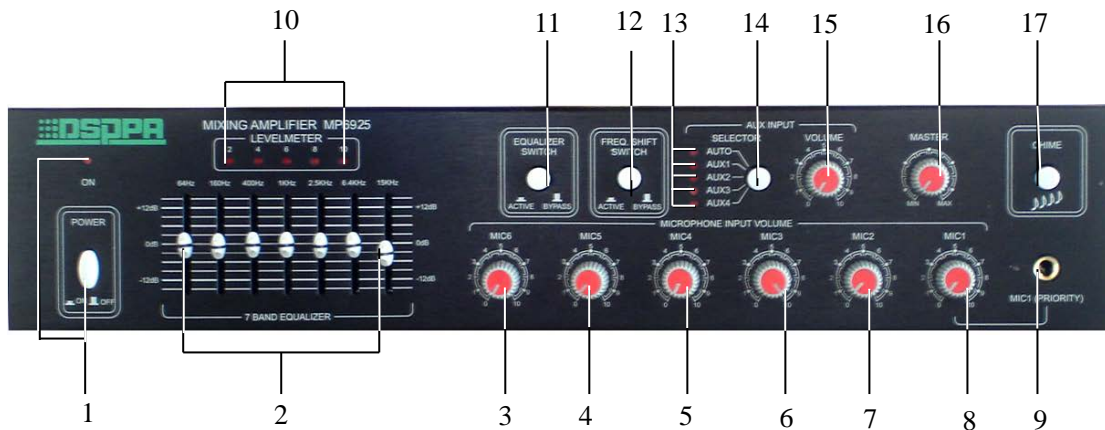
The products are designed according to the requirements of the conference hall having no whistle, with the tone loud and clear and the volume adjustable. The products provide with multiple protection, well-found function and with the stable operating state and can meet the requirements of conference site for the sound amplification and the background music.

1.2 Performance Features

- Convenient and reliable operation mode, integrated functional design.
- 4 line inputs, a line output, 6 microphone inputs (balanced with 24 V phantom power supply).
- 4 audio source channels can be selected automatically by their priority level.
- With mute function, easy to override the normal playing.
- With microphone frequency shift function, and the range of shifted frequency is adjustable.
- With built-in chime generator, and the chime output volume is adjustable.
- The volume of microphones and the audio source channels can be controlled independently, but with a master controller to control the total volume.
- 7-band equalizer, and the adjustment is convenient. The active/bypass option for equalizer is provided to select the output mode.
- With 100 V and 70 V rated voltage output, 4-16 Ω rated resistance output.

2. Brief Description of Product

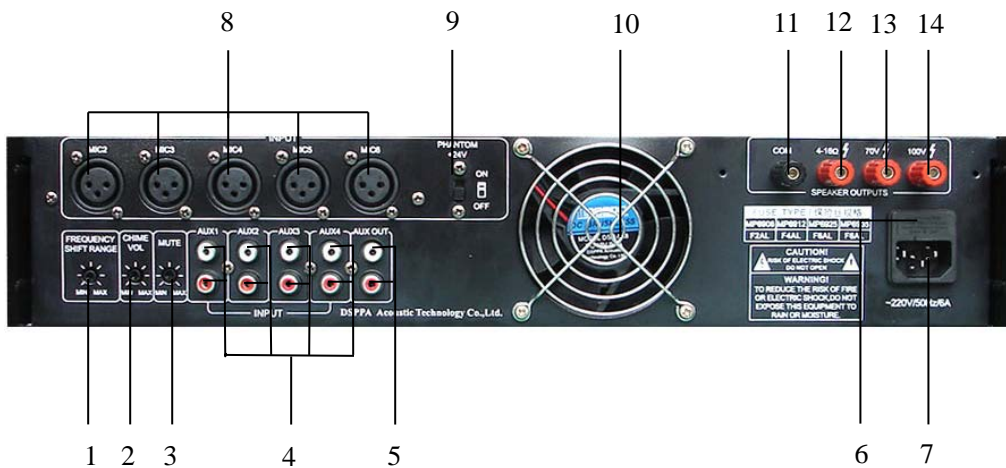
2.1 Description of Front Panel



- (1) Power switch and power indicator Press down the power switch button to turn on the power, and the power indicator is lit when the power is turned on; If press down the power switch button again to pop up the switch, the power is turned off, and the power indicator is distinguished when the power is turned off.
- (2) 7-band equalizer adjustment slider With the slider sliding up to increase the gain of frequency band, and sliding down to attenuate the gain of frequency band.
- (3) Microphone 6 volume adjustment knob To adjust clockwise to increase the volume, and to adjust counter clockwise to decrease the volume.
- (4) Microphone 5 volume adjustment knob To adjust clockwise to increase the volume, and to adjust counter clockwise to decrease the volume.
- (5) Microphone 4 volume adjustment knob To adjust clockwise to increase the volume, and to adjust counter clockwise to decrease the volume.
- (6) Microphone 3 volume adjustment knob To adjust clockwise to increase the volume, and to adjust counter clockwise to decrease the volume.
- (7) Microphone 2 volume adjustment knob To adjust clockwise to increase the volume, and to adjust counter clockwise to decrease the volume.
- (8) Microphone 1 volume adjustment knob To adjust clockwise to increase the volume, and to adjust counter clockwise to decrease the volume.
- (9) Microphone 1 port With the No.1 priority function, to facilitate the inserting of an emergent PA .
- (10) Output volume level meter If the 4th and the 5th indicators of the level meter are normally lit, it means that the output has a top chopping distortion, and the adjustment should be given to the corresponding volume control knob to decrease the volume, making the 4th and the 5th indicator flash.
- (11) Equalizer/bypass mode change over switch Press down the switch for the equalizer adjustment mode; Press the switch again to pop up for the direct mode.

- (12) Microphone frequency shift switch Press down the switch for the frequency shift function; Press the switch again to pop up for the direct mode.
- (13) Channel status display indicator When the channel selecton button selects a certain audio source input channel, the indicator of the corresponding channel will be lit and display.
- (14) Channel selection button A certain audio source channel can be selected for play by clicking the selection button. The selection is carried out among AUTO, AUX1 to AUX4 respectively, among them AUTO status is for the auto detection.
- (15) Channel volume adjustment knob It is used to adjust the volume magnitude for AUX1 to AUX4 channels, and the object adjusted is according to the gating condition of the channel selection switch.
- (16) Total volume adjustment knob Adjust clockwise to increase the volume, and adjust counter clockwise to decrease the volume. That knob can also be used to control the chime output volume.
- (17) Chime output trigger button Touch it lightly once to trigger the chime output, and after the end of playing the tone signs of '1-3-5- i ', it will stop automatically.

2.2 Description of Rear Panel

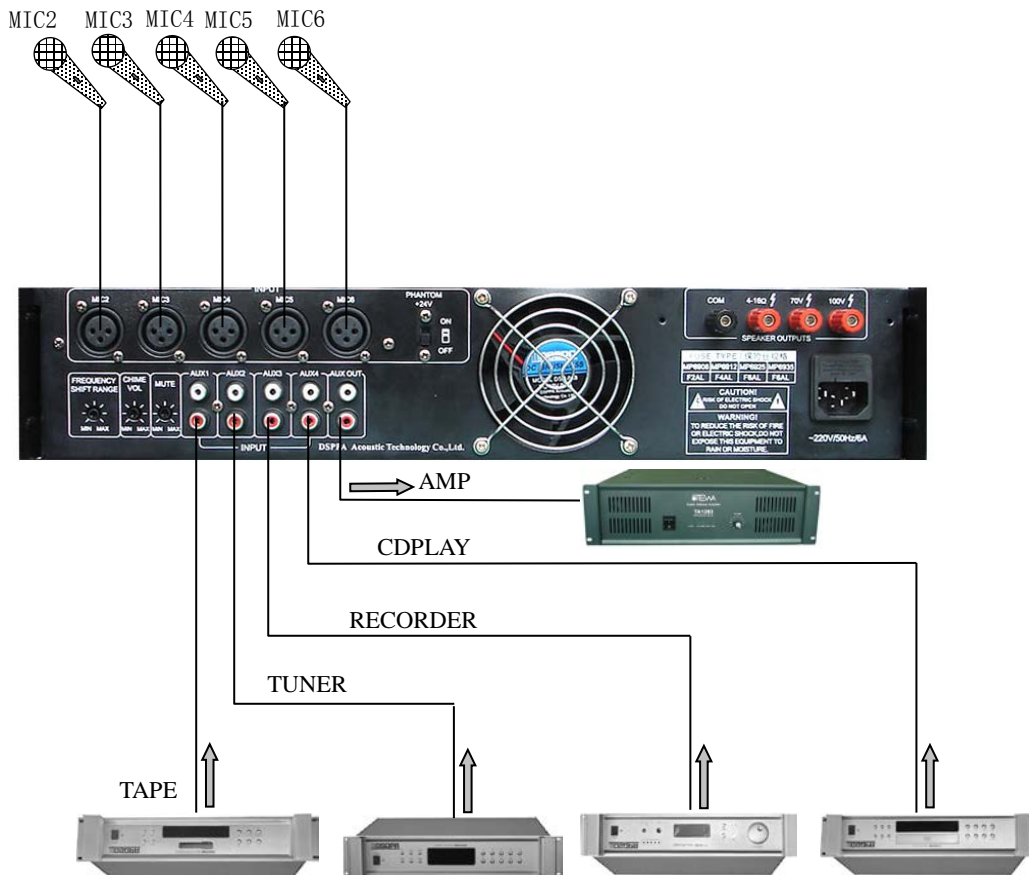


- (1) Frequency shift scope adjust knob Adjust clockwise to increase the frequency shift, and adjust counter clockwise to decrease the frequency shift.
- (2) Chime adjustment knob Adjust clockwise to increase the chime volume, and adjust counter clockwise to decrease the chime volume.
- (3) Mute adjustment knob Adjust clockwise to decrease the mute extent, and adjust counter clockwise to increase the mute extent.
- (4) AUX 1, 2, 3 and 4 input ports These four input ports are all for input line signals, connecting the external audio source equipment.

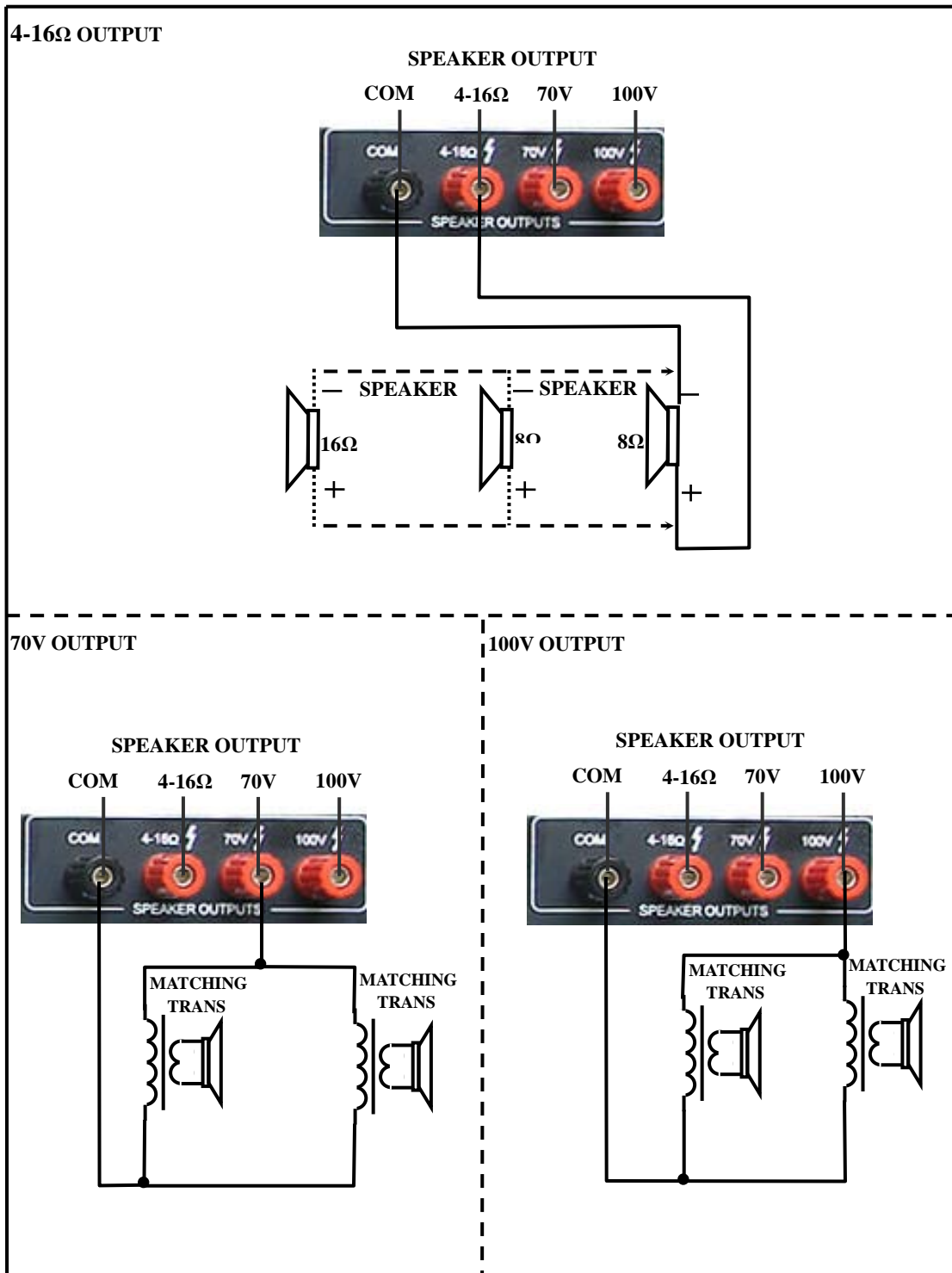
- (5) AUX output port As an line output port, connecting the external power amplifier.
- (6) AC220 V power supply fuse If the fuse is damaged, please use the fuse of same specifications for replacement.
- (7) AC220 V AC outlet Please do not pull out the power plug with power on.
- (8) MIC2, MIC3, MIC4, MIC5, MIC6 sockets They are XLR sockets.
- (9) 24 V phantom power switch If the switch is turned to "ON", the microphone will then have 24 V phantom power supply, and if the switch is turned to "OFF", the phantom power supply will be turned off.
- (10) Built-in cooling blower fan The working voltage is 12 V.
- (11) Power amplifier output common terminal.
- (12) Power amplifier 4-16 Ω rated resistance output terminal Available to connect several loud speakers that is rated resistance, but requiring that the total impedance should not be lower than 4 Ω.
- (13) Power amplifier 70 V rated voltage output terminal.
- (14) Power amplifier 100 V rated voltage output terminal.

3. Operation Instructions

3.1 Example of System Connection



3.2 Example of loud speakers Connection



Remarks: The type of connection for the four outputs are as follows: COM--4 ohm, COM-70V, COM-100V, but just one type of connection can be choose when it connect to the speakers. The connecting type COM-70V, COM-100V should never be connected to the speakers that should be connect to COM--4 ohm. Otherwise, there may be danger of damaging the speakers.

3.3 Adjustment Operation of Equalizer

The equipment is provided with two kinds of output modes, i.e. the equalizer available output and bypass output, and it is available to shift the output mode by press "EQUALIZER SWITCH" button at the front panel. The output is switched to the equalizer output mode when press down that button. The seven adjusting sliders of 7-band frequency adjustment section can be sliding up or down to increase or decrease the corresponding frequency of the band. When "EQUALIZER SWITCH" button is popped up, its output is shifted to the bypass mode, and in this case, the operation of 7-band frequency adjustment slider is invalid.

3.4 Description of Channel Selection

"SELECTOR" button of the front panel is used to select the audio source input channel. You can make the selection according to the indicator at the left side of the button. Among them, when "AUTO" indicator is lit, the equipment will detect the signals of the four audio source input channels automatically, and the process needs several seconds. It will play automatically after detecting the signal.

If the four input channels have two or more signal inputs, the equipment will select to play an audio source signal of a higher priority automatically. The priority level of the four input channel signals are in the order as AUX1, AUX2, AUX3, AUX4. When the equipment detects the signal and plays, the indicators corresponding to the "AUTO" and the playing channel will all be lit.

If it is required to specify a certain input channel signal as the audio source to be played at present, then press "SELECTOR" button to select the input channel. For example, to select AUX1 channel input signal as the playing audio source, press "SELECTOR" button, until the indicator corresponding to AUX1 channel is lit, the equipment will then play the program input from that channel. When you select manually the playing channel, the "AUTO" indicator will not be lit, but the indicator corresponding to the selected channel will be lit.

3.5 Description of Volume Control

A volume control knob is provided for each microphone channel, and is used to control the output volume of each microphone channel. The volume of each of four audio source input channels is controlled by the knob "VOLUME". The volume control knob "MASTER" is used to control the total output volume of the power amplifier. The chime output volume can be adjusted directly by the "MASTER" knob or by the "CHIME VOL" knob at the rear panel. Use a "+" bit screw driver to adjust clockwise to increase the volume, and to adjust counter clockwise to decrease the volume..

If the volume control knobs for audio source input channels and microphone channels as well as the chime are closed completely, then the "MASTER" volume control knob will be null. Similarly, if the "MASTER" volume control knob is closed, then the other volume control knobs are invalid.

The mute adjusting knob "MUTE" is used to control the mute extent of the equipment. If the signal input from chime or microphone 1, it can override the other input signals completely or just

weaken them a little by adjusting the knob. The adjusting scope is 0~-30 dB. The adjustment is set at -30 dB before dispatch from the plant.

To avoid the strong whistle of microphones, the equipment build in a frequency shift function especially: Press down the selection switch "FREQ. SHIFT SWITCH" to turn on the frequency shift function and when the selection switch is popped up, the frequency shift function is cancelled. The frequency shift adjusting knob "FREQUENCY SHIFT" is used to adjust the frequency shifting scope (the frequency shifting scope of microphone being 0-5 Hz).

3.6 Microphone and Priority Function

The equipment is equipped with 6 microphone ports in total, MIC1, MIC2, MIC3, MIC4, MIC5, MIC6. Among them, the MIC1 and the chime signal have the priority function, and their signals can override all the other signals. The microphones are provided with 24 V phantom power supply to facilitate the operation of capacitive microphone.

- While using the capacitive microphone, please turn the change over switch "PHANTOM" to "ON".
- When using the movable coil type microphone, please turn the change over switch "PHANTOM" to "OFF".

4. Precautions for Operation

4.1 Precautions for Safety Operation

- Please do not insert the power supply plug of the equipment into the power network before connecting properly the system circuitry.
- It should be ensured that the voltage supplied to the equipment be completely meeting the voltage requirements of the equipment, otherwise, there may exist the risk of burning the equipment.
- Danger voltage is inside the equipment, and the voltage is high enough to result in the personnel electric shock. Please do not open the housing without authorization to prevent the risk of electric shock.
- When the power switch of the equipment is at "OFF" status, the machine is not disconnected completely with the power network. For your safety, please pull out the power cord from the socket when the equipment is not to be used.
- Please do not place the equipment at a location too cold or too hot.
- Ensure a good ventilation and a good working condition for the equipment to prevent heating in the working hours, otherwise, the machine may be damaged due to too high a temperature.
- The master power switch should be turned off at a cloudy day and damp weather or when the equipment is not to be used for a long time.

- It is required to pull out the power plug to ensure that the equipment is completely disengaged from the power network when it is to dis-assemble or re-assemble any part of the equipment or to disconnect or connect plug of any electric apparatus of equipment or making other connection.
- When the equipment has a failure, it is not allowed for the non-professional personnel to open the housing to undertake the repair without authorization to prevent accident or aggravating the damaged condition of the equipment.
- Do not place any chemical subject with corrosivity near the equipment or on the top of equipment.

4.2 Precautions for After-sales Service

- The company will provide free of charge guarantee service (including provision of replacement part free of charge) for one year dating from the day of purchase for any quality problem in the normal range of application, provided that the installation and application are in conformity to the stipulations given in the Operation Manual.
- At any time for the repair guarantee, the consumer should present the Card of Guarantee and the sales invoice as a proof.
- The following conditions do not belong to the scope for free of charge service:
 - (1) Product damage due to mistaken installation, application or handling;
 - (2) Product damage due to abnormal condition (such as over power voltage or ambient humidity, etc.);
 - (3) Product damage due to force majeure such as calamity or accident;
 - (4) The number on product body has been converted, altered or removed;
 - (5) The product has once been repaired or modified by personnel not authorized by our company;
- Please keep the Operation Manual and Card of Guarantee carefully.
- As to the subjects or precautions not mentioned in the manual, please contact the distributor or visit the web page of our company: //www. dsppa. com when necessary.
- Please contact the service personnel of the company (or the distributor) if there is any failure phenomena during the period of guarantee, and the company shall not take the responsibility to repair free of charge if the damage is due to dis-assembling by yourself or from the repair by the technical personnel not from the company.

5. Packing List

MP69 series equipment one set, MP-P power cord one piece, connecting line (1.5 m 2-2 lotus plug line) one piece, black filling ring 4 pieces, M5 ×18 semi circular head stainless steel screw 4 pieces, black plastics protective cover 1 piece, Operation Manual one copy, Card of Guarantee one sheet.

6. Performance Specifications

Model	MP6906	MP6912	MP6925	MP6935
Rated output power	60W	120W	250W	350W
Output voltage adjust rate	Less than 2 dB			
Minimum power emf	Microphone 2.5±0.5 mV (unbalance input)			
	Microphone 2.5±0.5mV (balance input)			
	Wiring 250±50 mV			
Frequency response	50 Hz ~ 20 KHz (±3dB)			
Total harmonic distortion	Less than 0.5% (1 KHz, normal work condition)			
S/N ratio (A weighted)	Microphone: Greater than 75 dB			
	Wiring: Greater than 85 dB			
7-band equalizer	64Hz: ±12dB			
	160Hz: ±12 dB			
	400Hz: ±12 dB			
	1KHz: ±12 dB			
	2.5KHz: ±12 dB			
	6.4KHz: ±12 dB			
	15KHz: ±12 dB			
Protection function	DC, overload, short-circuit.			
Mute function	Microphone 1 and chime input covering other inputs			
Phantom power	DC24V			
Frequency	0-5 Hz higher than the input signal frequency			
Rating power	AC 220V / 50Hz			
Power consumed	120 W	250 W	500 W	650 W
Dimensions	430×368×88 mm			
Gross weight	12.5 kg	16 kg	15.5 kg	16.5 kg
Net weight	11 kg	14.9 kg	14 kg	15kg

No prior notice will be given for modification of specifications in any.