

# MIXER AMPLIFIER

## User manual

## ABOUT OPERATION INSTRUCTION

This operation instruction shall come into effect on the date on which the development of the integrated power amplifier with partitions NVS-PA0016006CP/NVS-PA0017006CP/NVS-PA0018006CP equipment is completed. The operation instruction contains the systematic introduction to the integrated power amplifier with partitions NVS-PA0016006CP/NVS-PA0017006CP/NVS-PA0018006CP equipment, precautions for use, instruction to connection of system, and instructions to operations of products, and so on. The user shall read this operation instruction carefully prior to connection, installation and use, and shall operate in accordance with the instructions herein.



The attention must be paid to the instructions with such identification on the back panel of the machine. Please use or operation the machine following such instruction.

## WARNING

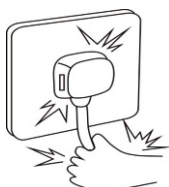
In order to prevent the personal injury to user and other persons, the damage to equipment or loss of assets, please abide by the following basic precautions:



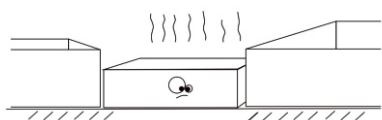
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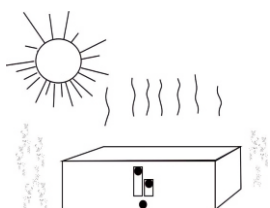
This mark indicates what must be done.



Check the power line for damage; please do not unplug by pulling the power cord but unplug directly; otherwise, it will lead to electric shock, short circuit or fire.

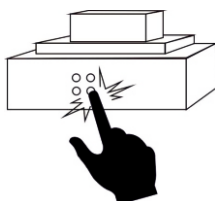


During the process of use, do not block the vent. It is required to keep all the vents unblocked in order to prevent the overheating.

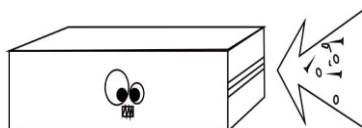


Please do not put this equipment in the heavily dusty, shocking, extremely cold, or hot environment

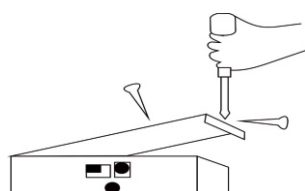




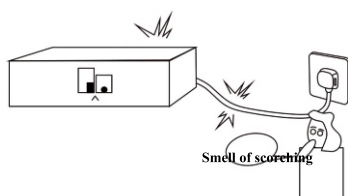
Please do not put any weight on this equipment. Do not operate switch and button or connect the external audio source equipment with overexertion.



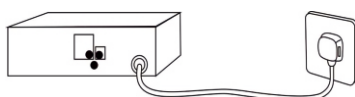
Prevent the entry of any foreign matter (e.g. paper and metal) through the clearance or opening of the equipment into it; in such case, please disconnect the power supply immediately.



Do not try to remove any component in the equipment or transform it in any way.



In case of the sudden interruption, or abnormal smell, or smoking during the operation of the machine, please unplug the power supply to prevent the electric shock, fire and other accidents, and ask the professionals to repair the equipment.



Please make sure to unplug the AC power line or switch off the socket on the wall to achieve the zero energy consumption if this equipment is out of service for a long term.



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# 1. INTRODUCTION OF PRODUCT

## 1.1 DESCRIPTION OF EQUIPMENT

This is a cost-effective professional Mixer amplifier with high-grade aluminum-alloy panel and elegant appearance, which is suitable for household, factory, school, hospital, shop and other commercial applications. With imported power tube, this amplifier has strong power, wide frequency band, low noise, high fidelity and quality. There are constant voltage output of six zones and constant impedance output in order to facilitate the user to connect different loudspeakers. With perfect and reliable overload protection, short-circuit protection, and overheat protection, the safety performance of this equipment is improved.

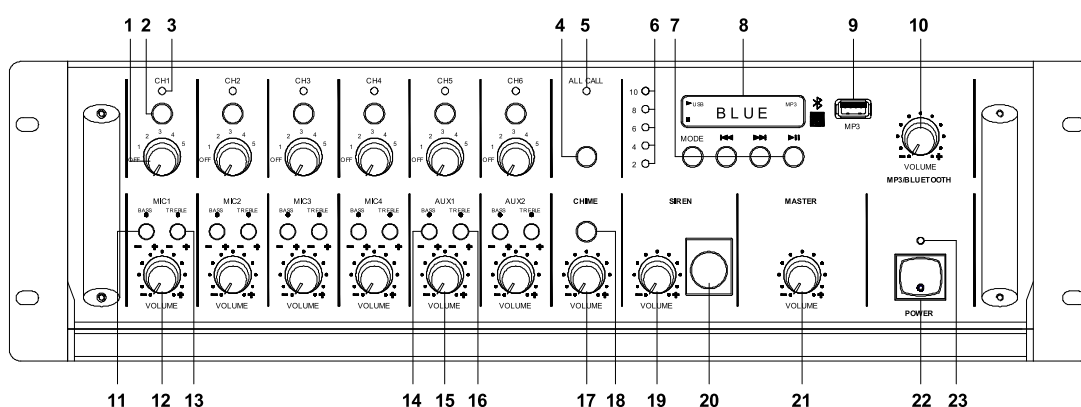
## 1.2 PERFORMANCE CHARACTERISTICS

- Four channels of microphone and two channels of line input, and separate adjustment of treble and bass;
- With 6-partitions selector, which makes it possible to select and control each partition separately, separate adjustment of volume with indicator for each partition, adjustable volume of all partitions with indicator.
- Built-in chime and alarm generator, separate control of volume, with indicator and switch, and alarm short-circuit triggering terminal;
- When the built-in alarm generator is started up, the background music is turned off, and the output from six channels of the partitions will be turned on;
- There are independent volume control and master volume control for audio source input;
- With display of output power level indicator lamps (5 LED lights) on the front panel;
- With USB and Bluetooth player, support formats such as MP3, WMA, WAV and ACC;
- Telephone TEL input on rear panel with controllable call volume;
- Four Network interfaces on the rear panel which is to connect with CM12 paging MIC and control partition output remotely;
- Built-in 24V DC power input;
- Built-in 48V phantom power for four channels of microphone, MIC1-4 with independent volume control switch;
- Fan on the rear panel to protect machine from overheat;
- Output short-circuit protection and giving alarm;
- Priority level function (Default):
  - Level 1: Telephone (TEL), remote pager;
  - Level 2: Microphone 1,
  - Level 3: alarm (SIREN), EMC, chime;
  - Level 4: Microphone 2, microphone 3, microphone 4, line 1, line 2, MP3 player.

## 2. DESCRIPTION OF APPEARANCE

### 2.1 DESCRIPTION OF FRONT PANEL

This is a cost-effective professional intelligent address system with high-grade aluminum-alloy panel and elegant appearance, which is suitable for household, factory, school, hospital, shop and other commercial applications. With imported power tube, this amplifier has strong power, wide frequency band, low noise, high fidelity and quality. There are constant voltage output of six zones and constant impedance output in order to facilitate the user to connect different loudspeakers. With perfect and reliable overload protection, short-circuit protection, and overheat protection, the safety performance of this equipment is improved.



**1 Partition CH1 volume adjustment knob**

Adjust the volume of the partition CH1. There are 5 volume levels. Rotate clockwise to turn up volume and counterclockwise to turn down.

**2 Partition CH1 switching key**

Press this key to turn on the partition CH1, and then press again to turn off. Partition CH2, CH3, Ch4, Ch5, CH6 are the same.

**3 Partition CH1-on indicator**

When partition CH1 is turned on, this indicator is alight. Same for CH2, CH3, CH4, CH5, and Ch6

**4 All partitions control key**

Press this key to turn on all the partitions.

**5 All partitions indicator**

Press key 4 to turn on the paging for all the partitions, and this indicator is alight.

**6 Output level indicator lamp**

Display the output level.

**7 MP3/Bluetooth player control key:**

MODE

: Mp3 and AUX switching key

: Previous song key;

: Next song key;

: Play/pause key;

**10 MP3 volume adjustment knob**

Adjust the volume of MP3. Rotate clockwise to turn up volume and counterclockwise to turn down.

**11 Microphone MIC1 bass adjustment knob BASS**

Taking central position as benchmark, rotate counterclockwise to attenuate the base, and rotate clockwise to enhance the base. MIC2, MIC3, and MIC4 are the same.

**12 Microphone MIC1 volume adjustment knob**

Adjust the volume of microphone MC1. Rotate clockwise to turn up volume and counterclockwise to turn down. Same for MIC2, MIC3, and MIC4.

**13 Microphone MIC1 treble adjustment knob TREBLE**

Taking central position as benchmark, rotate counterclockwise to attenuate the treble, and rotate clockwise to enhance the treble, and then MIC2, MIC3, MIC4 and so on.

**14 Auxiliary input AUX1 bass adjustment knob BASS**

Taking central position as benchmark, rotate counterclockwise to attenuate the base, and rotate clockwise to enhance the base. Same for AUX2.

**15 Auxiliary input AUX1 volume adjustment knob**

Adjust the volume of auxiliary input AUX1. Rotate clockwise to turn up volume and counterclockwise to turn down. Same for AUX2.

**16 Auxiliary input AUX1 treble adjustment knob TREBLE**

Taking central position as benchmark, rotate counterclockwise to attenuate the treble, and rotate clockwise to enhance the treble. Same for AUX2.

**17 Chime volume adjustment knob**

To adjust volume of Chime. Rotate clockwise to turn up volume and counterclockwise to turn down.

**18 Channel chime on/off switch**

Press this key to turn on the chime.

**19 Siren volume adjustment knob**

Adjust the volume of siren. Rotate clockwise to turn up volume and counterclockwise to turn down.

**20 Siren on-off button**

Press this button to open Siren and indicator will also be turned on. All six partition will be turned on and signal will switch to max output. Press this button again to close Siren and indicator will be closed. All six partition will restore its previous status.

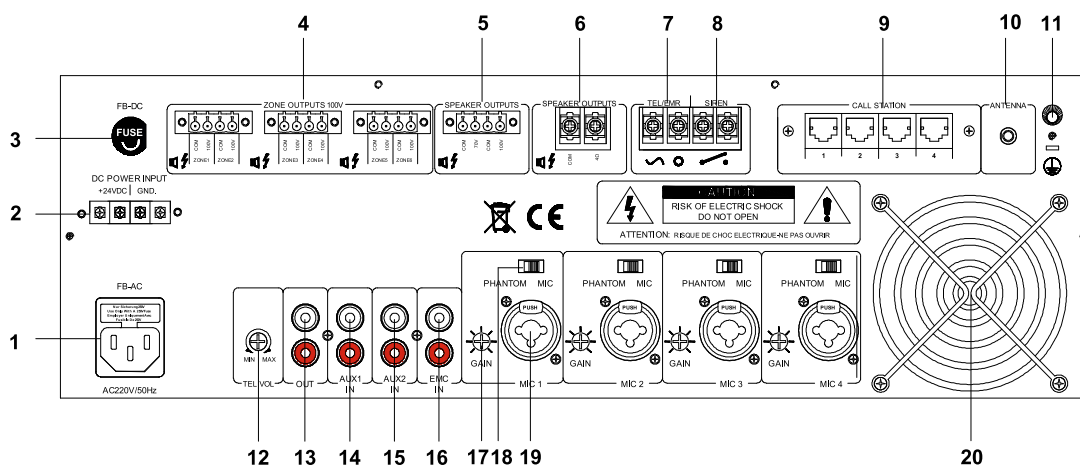
**21 Master volume adjustment knob**

Adjust the level of all the signals. Rotate clockwise to turn up volume and counterclockwise to turn down.

**22 Power switch**

**23 Power indicator**

## 2.2 DESCRIPTION OF REAR PANEL



1. **Power supply interface**  
Connect with ~220V/50Hz power supply.
2. **24V connection terminal**
3. **Fuse holder**
4. **Output terminal (ZONE1-6)**  
The partitions may be connected to loudspeaker lines at will.
5. **Output terminal**  
Connect 70V/100V loudspeaker output.
6. **4-16Ω output**  
Connect with 4-16Ω speakers
7. **TEL IN**  
Can be used to realize remote telephone call. When using, connect telephone line with this device.
8. **Siren short circuit trigger terminal**  
Short circuit this terminal could trigger siren signal.
9. **Remote paging control interface**  
Could connect with four NVS-PA0015006PM paging MIC and control partition output remotely. Remote paging MIC is connected by crystal head.
10. **Blue tooth Antenna**
11. **Grounding terminal**
12. **Telephone volume control knob**  
Adjust the volume of telephone input with the screwdriver.
13. **Auxiliary output interface (To connect another power amplifier)**  
0dB, 600Ω, unbalanced output type, output of all the input signals.
14. **Auxiliary input socket (AUX1)**  
Connect CD or other sound sources.
15. **Auxiliary input socket (AUX2)**  
Connect CD or other sound sources.



#### 16. Emergency input socket (EMC)

Used for input of fire signal.

#### 17. MIC1 gain adjustment control knob

In order to prevent sever clipping of balanced phantom input, reduce gain properly, and then for MIC2, MIC3, MIC4 and so on.

#### 18. +48V phantom power control switch

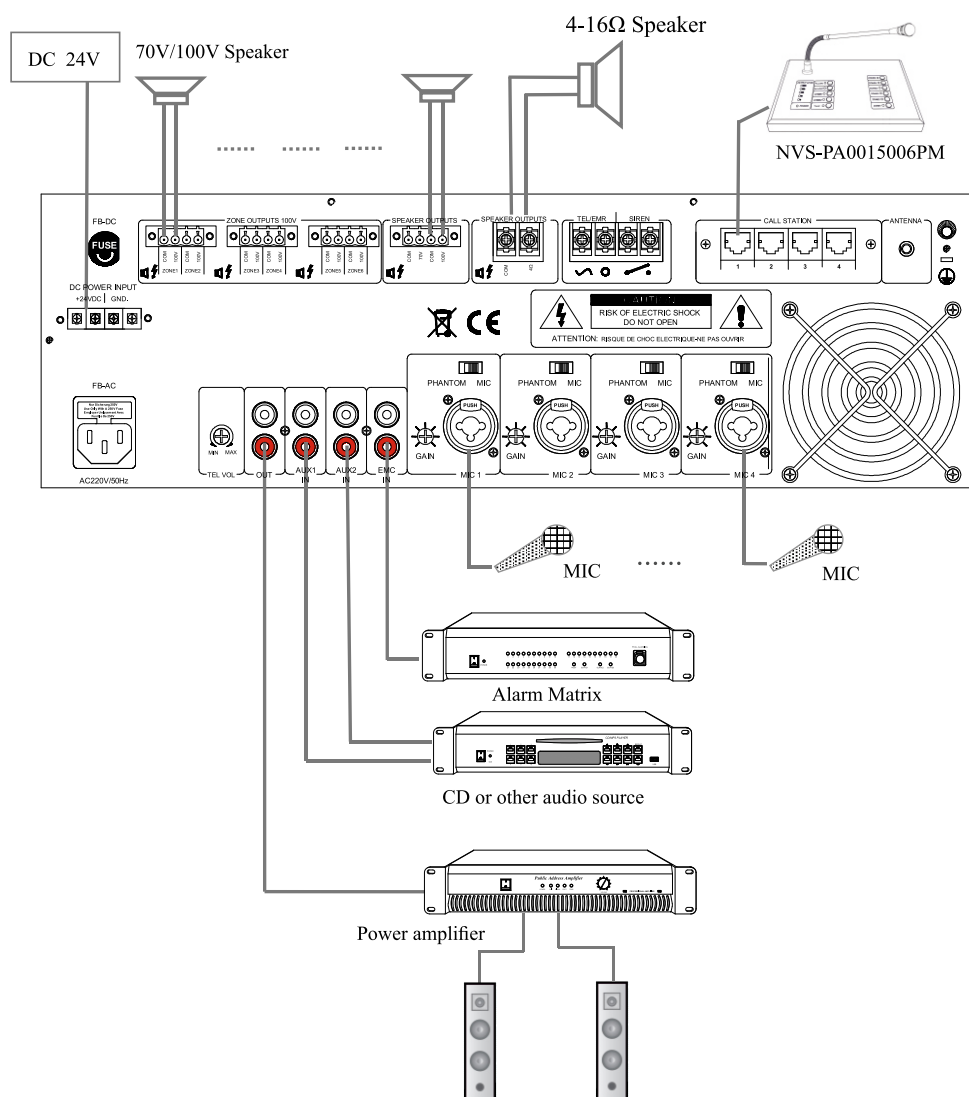
Control MIC1, MIC2, MIC3, and MIC4 separately.

#### 19. Microphone MIC1 input socket

Same for MIC2, MIC3, and MIC4.

#### 20. Cooling fan

### 3. INSTRUCTION TO CONNECTION



Note: Please refer to the connection method of NVS-PA0015006PM for the connection between NVS-PA0016006CP and NVS-PA0015006PM. Please see the operation instruction to NVS-PA0015006PM.

## PRECAUTIONS FOR SAFETY IN USE

### 1. Precautions for safety in use

- Before connecting the system line properly, do not insert the power plug of this equipment into the grid.
- Ensure the voltage input to the equipment shall be fully consistent with the voltage of this equipment to prevent the risk in the burning of the equipment.
- There is the hazardous voltage in the machine, which is sufficient to cause the electric shock to the person. Please do not open the machine housing without authorization to prevent the hazard of electric shock.
- In the event that the power supply to this equipment is turned off, the machine is not fully disconnected with the power supply of the grid. For the purpose of safety, please pull the power plug out of the socket when the equipment is not in service.
- Please do not put the equipment in the extremely cold or hot place.
- Ensure the good ventilation in the working environment of the equipment, to prevent the damage to the equipment due to the heating in working and excessively high temperature.
- In the rainy and humid days or if the machine is not in service for a long term, please pull out the power plug.
- Before removing or reassembling any part of the equipment, disconnecting or reconnecting any electrical plug or other connections of the equipment, be sure to pull out the power plug to ensure the full disconnection of the equipment with the grid.
- In case of any fault in the equipment, the non-professional person shall not disassemble the housing for repair without the approval, in order to prevent accident or aggravate the damage to the equipment.
- Do not put any corrosive chemicals nearby or on the equipment

### 2. Precautions for after-sales service

- In case of the installation and operation according to this instruction, the company will provide the free warranty service (Including replacement of parts free of charge) for any problem in the normal operation for three years since the date of purchase.
- In case of the warranty, the user shall show the user's voucher of warranty card and the invoice as the certificate.
- In any of the following cases, the free warranty shall not be applicable:
  1. The damage to the product due to the incorrect installation, use or handling;
  2. The damage to the product due to the abnormal conditions (e.g. excessively high power voltage or ambient humidity);
  3. The damage to the product due to natural and man-made disaster and other accidents;
  4. The number on the product body is changed, altered or removed;
  5. The product has been repaired or refitted by the person other than those authorized by the company;
- Please keep the operation instruction and warranty card properly.
- For the issue or matter not covered herein, please contact the distributor or visit [www.nordencommunication.com](http://www.nordencommunication.com)
- In case of any fault occurred during the period of warranty, please contact the service personnel of our company (or distributor); our company will not take responsibility for the damage due to the unauthorized disassembly or the repair by the person other than the technicians of our company

## PACKING LIST

No.	List	Quantity
1	Amplifier	1 set
2	User Manual	1 copy
3	1500MM double-modulator audio cable	1 piece
4	4P green plugs	4 pieces
5	5x19 semi-countersunk head Phillips screw (silver)	4 pieces
6	Power Line	1 piece
7	H21-612 remote controller	1 piece
8	Gaskets with the machine (Black)	4 pieces
9	Certificate	1 copy
10	Warranty Card	1 copy

## PERFORMANCE SPECIFICATION

Type	NVS-PA0016006CP	NVS-PA0017006CP	NVS-PA0018006CP
Rated Power	120W	250W	350W
Constant voltage output	70V, 100V		
Constant impedance output	4-16 $\Omega$ (balanced, not grounded)		
input	300mV ( $\pm 50$ mV), 1kHz/unbalanced;		
Microphone input sensitivity	3. 0mV ( $\pm 0. 5$ mV), 1kHz/unbalanced 5. 0mV ( $\pm 0. 5$ mV), 1kHz/balanced		
EMC input sensitivity	300mV ( $\pm 50$ mV), 1kHz/unbalanced		
Telephone sound source input sensitivity	775mV ( $\pm 50$ mV), 1kHz/unbalanced		
Frequency response	MIC: 100Hz-12kHz ( $\pm 3$ dB); TEL: 100Hz-12kHz ( $\pm 3$ dB); LINE: 80Hz-16kHz ( $\pm 3$ dB);		
Tune control	$\pm 10$ dB (Bass: 100Hz); $\pm 10$ dB (Treble: 10KHz);		
Signal to noise ratio	MIC: $\geq 55$ dB; TEL: $\geq 65$ dB; LINE: $\geq 75$ dB;		
Auxiliary line output	0dBV, unbalanced		
Remote microphone input	2000mV, balanced		
Protection function	Overload protection, short-circuit protection, temperature protection		
Total harmonic distortion	$\leq 1\%$ (1kHz, normal working condition)		
Output adjustment rate	From full load to no load, $\leq 3$ dB		
Power consumption	250W	600W	800W
Dimension of machine	483×413×132 (L×W×H mm)		
Dimension of packing	540×510×200 (L×W×H mm)		
Net weight	14.7kg	19.9kg	22.1kg
Gross weight	18.0kg	23.2kg	25.4kg

Specifications are subject to change without notice

## ATTENTION

- If the power switch of the equipment is off, the machine is not disconnected to the grid; for the purpose of safety, please pull the power line plug out of the socket if this equipment is not in service.
- This equipment shall not suffer from water dripping or spraying. Do not place the vase full of water on to the equipment.
- Do not open the cover plate of the machine without authorization to prevent electric shock. The repair shall be conducted by the professional with professional certificate if necessary.
- The terminal marked with in the equipment indicates the hazardous electrification. The connection of such terminal shall be completed by the trained personnel.
- This equipment is connected to the power supply of the grid with the power line plug; in case of any fault or risk in the equipment, pull out the power line plug to disconnect the connection between the equipment and the grid; therefore, the power line plug shall be put in the place easy for plug-in/out of the power line.



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