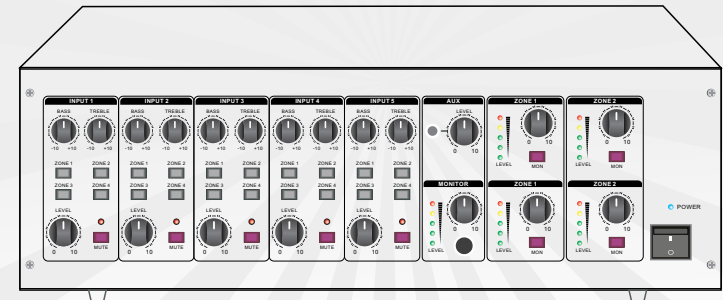


# PROFESSIONAL PUBLIC ADDRESS AMPLIFIER



NF00137

## 29. THE MIC/LINE INPUT CONNECTOR.

These are the channels from Channel1 to Channel3. You can connect balanced, low impedance microphones to the XLR socket. On the 1/4" phone jack you can connect either a microphone or a line level instrument. You shall never connect an unbalanced microphone to the XLR socket if you do not want to damage both the Microphone and the Mixer.

## TECHNICAL SPECIFICATION

|                                  |                                                                                                                                                                    |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| OUTPUT POWER CAPACITY            | RMS: 60W x 4                                                                                                                                                       |
| POWER SUPPLY                     | AC: 110-120V 50/60Hz<br>AC: 220-240V 50/60Hz                                                                                                                       |
| FREQUENCY RESPONSE               | 50Hz~18KHz (±3dB)                                                                                                                                                  |
| INPUT SENSITIVITY                | MIC : -50dB    LINE : -17dB<br>AUX : -18dB    TEL. : -30dB                                                                                                         |
| TONE CONTROLS                    | BASS: ±10dB (100Hz)<br>TREBLE: ±10dB (10KHz)                                                                                                                       |
| TOTAL HARMONIC DISTORTION        | <0.5%                                                                                                                                                              |
| SIGNAL / NOISE RATIO             | MIC ≥65dB<br>AUX ≥75dB                                                                                                                                             |
| CONTROLS                         | MIC LEVEL CONTROL<br>AUX LEVEL CONTROL<br>TONE CONTROL (BASS, TREBLE)<br>EACH CHANNEL HAS THE INPUT LEVEL CONTROL<br>AC SWITCH<br>PHONE CONTROL<br>MONITOR CONTROL |
| OUTPUT IMPEDANCE                 | 4 Ω, 8 Ω                                                                                                                                                           |
| LINE OUTPUT                      | 50V, 70V, 100V                                                                                                                                                     |
| CHIME FUNCTION                   | YES                                                                                                                                                                |
| VU-METER (LED)                   | YES                                                                                                                                                                |
| TELEPHONE PAGING SELECT FUNCTION | YES                                                                                                                                                                |
| INPUT 1 PRIORITY                 | YES                                                                                                                                                                |
| DIMENSION                        | 420X342X133mm                                                                                                                                                      |

## SAFETY INSTRUCTIONS



The symbol is used to indicate that some hazardous live terminals are involved with in this apparatus, even under the normal operating conditions.



The symbol is used in the service documentation to indicate that specific component shall be only replaced by the component specified in that documentation for safety reasons.



Protective Ground Terminal



AC mains (Alternating Current)



Hazardous Live Terminal

**ON:** Denotes the apparatus turns on.

**OFF:** Denotes the apparatus turns off, because of using the single pole switch, be sure to unplug the AC power to prevent any electric shock before you proceed you service.

### WARNING:

Describes precautions that should be observed to prevent the danger of injury or death to the user.



Disposing of this product should not be placed in municipal waste and should be separate collection.

### CAUTION:

Describes precautions that should be observed to prevent damage to the apparatus.

## WARNING

- **Power supply**  
Ensure the source voltage matches the voltage of the power supply before turning ON the apparatus.  
Unplug this apparatus during lightning storms or when unused for long periods of time.
- **External Connection**  
The external wiring connected to the output hazardous live terminals requires installation by an instructed person, or the use of ready-made leads or cords.
- **Do not Remove any Cover**  
There are maybe some are as with high voltages inside, to reduce the risk of electric shock, do not remove any cover if the power supply is connected, The cover should be removed by the qualified personnel only.  
No user serviceable parts inside.
- **Fuse**  
To prevent a fire, make sure to use fuses with specified standard (current, voltage, type). Do not use a different fuse or short circuit the fuse holder.  
Before replacing the fuse, turn OFF the apparatus and disconnected the power source.
- **Protective Grounding**  
Make sure to connect the protective grounding to prevent any electric shock before turning ON the apparatus.  
Never cut off the internal or external protective grounding wire or disconnect the wiring of protective grounding terminal.

- Operating Conditions

This apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on this apparatus. To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

Do not use this apparatus near water. Install in accordance with the manufacturer's instructions, Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat. Do not block any ventilation openings. No naked flame sources, such as lighted candles, should be placed on the apparatus.

### IMPORTANT SAFETY INSTRUCTIONS

- Read these instructions
- Follow all instructions
- Keep these instructions
- Heed all warnings
- Only use attachments / accessories specified by the manufacturer

- Power cord and plug

Do not defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

- Cleaning

When the apparatus needs a cleaning, you can blow off dust from the apparatus with a blower or clean with rag etc. Don't use solvents such as benzol, alcohol, or other fluids with very strong volatility and flammability for cleaning the apparatus body, Clean only with dry cloth.

- Servicing

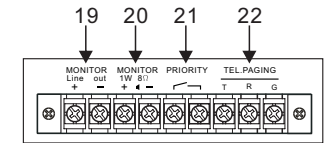
Refer all servicing to qualified personnel, To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally or has been dropped.

## 19. MONITOR LINE OUT

Monitor Line Out can be connected with other appliance, such as amplifier, recorder, etc.

## 20. MONITOR 1W/8Ω

The terminal is meant for the connection of a small external loudspeaker that gets driven by an internal auxiliary power amplifier, providing a nominal output 1Watt. Only the mixed audio signal coming from "AUX IN" are included in the outputted signal. In addition, the output signal is controlled only by the volume control of the "CH4", "CH5", music signal level control.



## 21. "PRIORITY" TERMINAL.

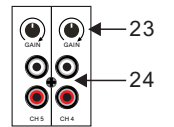
When these terminals are short-circuited (i.e. By means of using an electrical switch), the audio signals coming from "CH4", "CH5", are attenuated while the signals coming from "CH1", "Ch2", "CH3" are gaining priority.

## 22. INPUT "AUX PAGING"

The terminals input lets you connect to an auxiliary signal. The input features "Voice Priority" function, which overrides all other input signals once, an auxiliary message is sent. If you want to have this function disabled forever, please contact a distributor.

## 23. CH5/CH4 GAIN CONTROLLER

It can a just the level of the CH5/CH4 input.



## 24. "LINE IN" INPUTS

An audio source with a high level output signal, such as an AM/FM tuner, a cassette deck, a CD player, etc. Use input sensitivity switch suitable for difference appliances. They are able to take RCA-type coaxial connectors, and unbalanced signals.

## 25. TEL. IN ZONE SWITCHES

There are four dip switches here. Push the dip switch up, it switches off and vice versa and can assign the input to different zone.

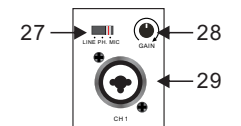
## 26. LEVEL

It can adjust the level of the TEL. input.



## 27. CH1, CH2, CH3 AND INPUTS SENSITIVITY AND XLR PHANTOM SWITCH

By turning the switch onto the "LINE" position the CH1, Ch2, Ch3 input can be connected to an audio source with high level signal output. By turning these switches onto the MIC position, CH1, CH2, Ch3 input can be connected to a dynamic microphone with low impedance. By turning the switch onto the "Phantom" position it connects phantom supply for XLR pin2 and pin3 of CH1, CH2, Ch3, which is necessary to operate condenser microphone which requires this type of external supply. It is recommended to use this switch with the general volume set on minimum.



## 28. GAIN

It is adjust the level of the inputs.

## GENERAL DESCRIPTION AND FEATURES

### DESCRIPTION

They are designed for PA system applications such as paging, announcements, intercommunications, background music and broad-casting in industrial plants, offices, schools, churches, department stores, shopping centres, night clubs, dining rooms, convention halls, auditoriums and recreation areas.

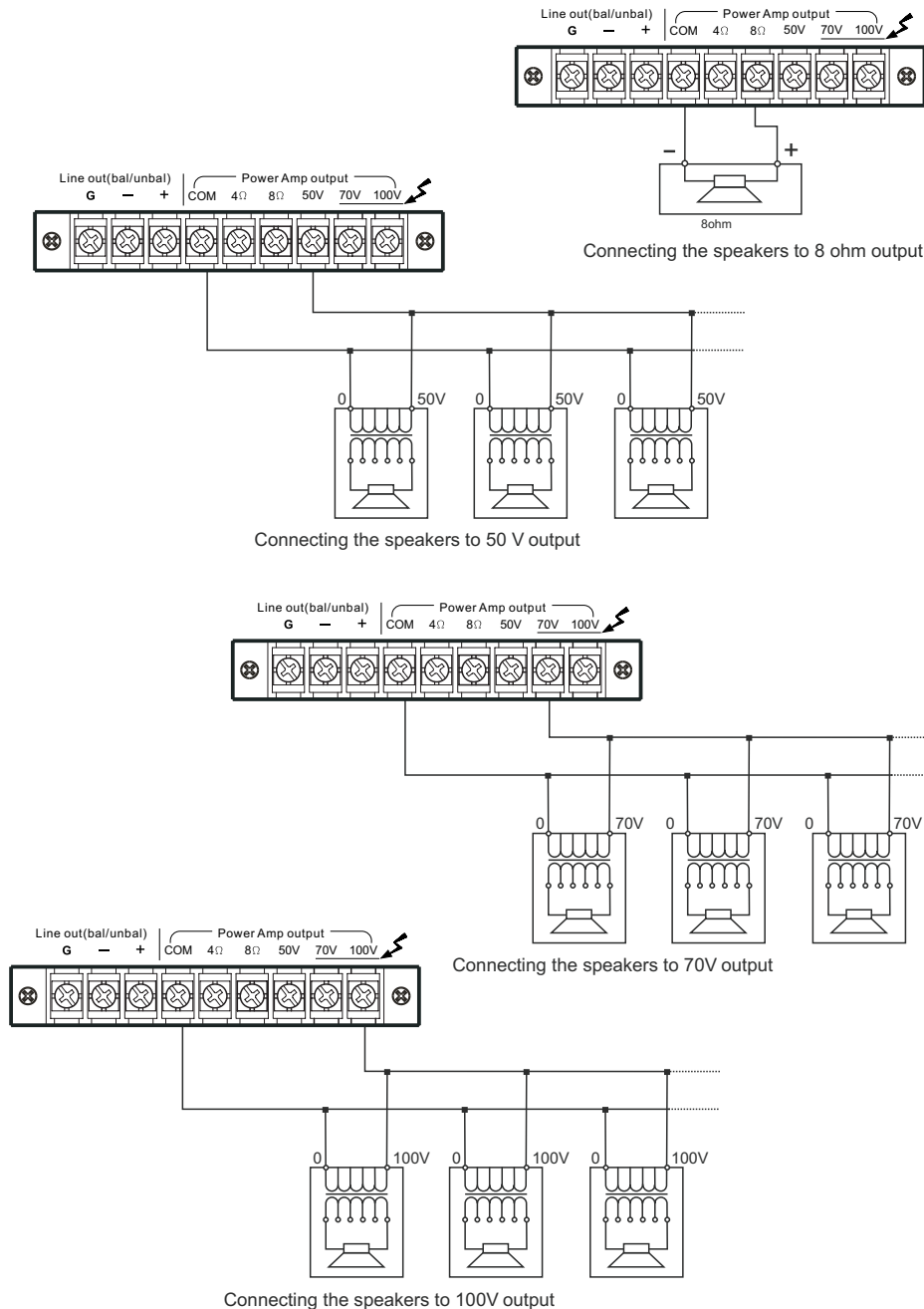
More kinds of protective for this series: such as overload, short-circuits of output, overheat; and you can use it safety and freely. It's very simple to install, it also can offer therack brackets according to your requirements.

The series amplifiers come with 3 microphone inputs, 2 auxiliary inputs line out. Balanced or unbalanced used with unbalanced microphone. Auxiliary inputs are provided for high level signal sources such as radio tuner, tape recorder, mixer pre amplifier, remote microphone and record player with ceramic or crystal type cartridge. Speaker outputs are complete with 4ohm, 8 ohm, 50V, 70V and 100V on the terminal strip. The line output is equipped for a booster amplifier and

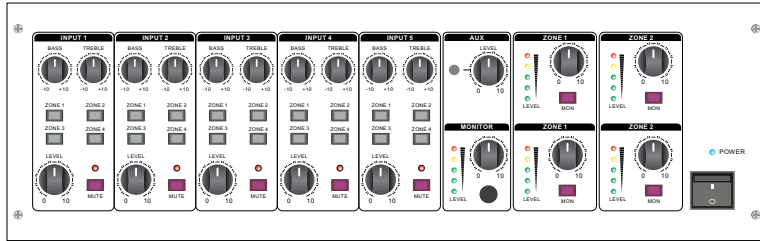
Each input volume can be controlled with the corresponding individual input volume control and can further be adjusted by means of a master volume control and individual bass and treble tone controls, even in case of AC power failure.

### FEATURES

- 3-Combo (XLR+6.3mm) jacks inputs with sensitivity select switches for LINE, dynamic MIC and condenser microphones inputs.
- 4-RCA jack for AUX inputs.
- Phone input.
- 4-Zone paging.
- Independent volume control for all inputs.
- Different zone can hear different music.
- Different input can send to different zone.
- Built-in monitoring with volume controller.
- Built-in bass and treble every channel.
- Built-in gain control every channel.
- Built-in mute function with selected.
- Balanced LINE output.
- Built-in tel. Paging.
- Built-in monitor output.
- Built-in priority function.
- Bipolar power switch.
- AC supply admit 110-120V and 220-240V selected.
- IEC AC outlet.
- 2U size designed admit the rack mounted.
- Overload protection.
- Short circuit protection.
- Over current protection.
- Fixed impedance 4ohms and 8ohms outputs.
- Fixed voltage 50V, 70V and 100V outputs.
- Cooling with intelligent fan.

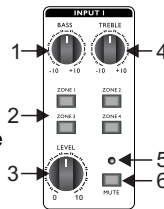


## FRONT PANEL



### 1. BASS KNOB

This is the Bass control. Boost male voice or kickdrum and bass guitar. Your system will sound much bigger than what it is. The gain range goes from -10dB to +10dB and the center frequency is 100 Hz.



### 2. ZONE SELECTOR

Z1, Z2, Z3, Z4 can be considered as signal assignment switches. Press the button Z1 down and signal will be assigned to ZONE 1. Release the button and it stops assigning signal to ZONE 1. Z2, Z3, Z4 can be operated in the same way.

### 3. VOLUME CONTROL

When it is 0 dB, the volume is lowest, it is 10 dB, the volume is highest.

### 4. TREBLE KNOB

This is the treble control. You can use it to get rid of high frequency noises or to boost the sound of cymbals or the high harmonics of the human voice. The gain range goes from -10dB to 10dB with the central frequency 10kHz.

### 5. MUTE LED

When the mute key is pressed down, mute LED lights up, and vice versa.

### 6. MUTE

It mutes the signals from the corresponding channel.

### 7. HEADPHONE VOLUME CONTROLLER

This knob controls the volume of Phone (refer to 7). Turn the knob clockwise, and it increases the volume, and vice versa.



### 8. PHONE

This jack is for headphone output.

### 9. MONITOR VOLUME

This knob controls the output signal level to monitor output.



### 10. ZONE VOLUME

VOLUME controls the output signal level of ZONE.

### 11. LED VU-METER

This stereo 5 segment LED-meter indicates the level of the overall output signal.

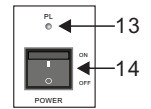


### 12. MONITOR selector

Push MONITOR button down, then it connects the signal from amplifier 1 to monitor volume. Release the button, then it cuts off the signal connection to monitor volume. The other three buttons are operated in the same way.

### 13. PL

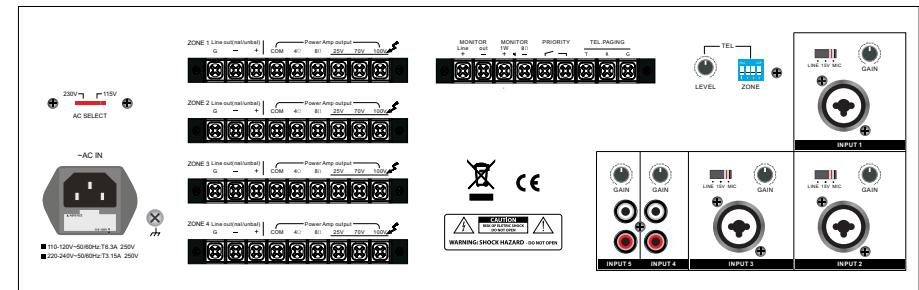
This LED is the power indicator. When the amplifier is powered on, this LED lights up. When the amplifier is powered off, this LED lights off.



### 14. POWER SWITCH

When the switch is set in the position ON, the unit is powered on. When the switch is set in the position OFF, the unit is powered off.

## REAR PANEL



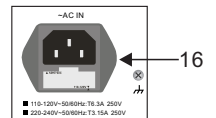
### 15. VOLTAGE SWITCH

This switch is used to select voltage (115V / 230V) as requirement.



### 16. AC CONNECTOR AND AC FUSE

This connector is meant for the connection of the supplied mains cord. The fuse protects the alternating currents supply circuit of the equipment. The fuse can only be changed in the event of a fault.

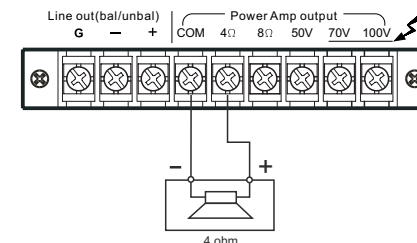


### 17. LINE OUT BAL/UNBAL

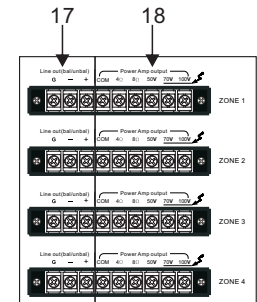
These terminals can be connected with other appliance, such as amplifier, recorder, etc.

### 18. POWER AMP OUTPUT

These terminals allow connecting speakers.



Connecting the speakers to 4 ohm output



EXAMPLE OF POSSIBLE CONNECTIONS

