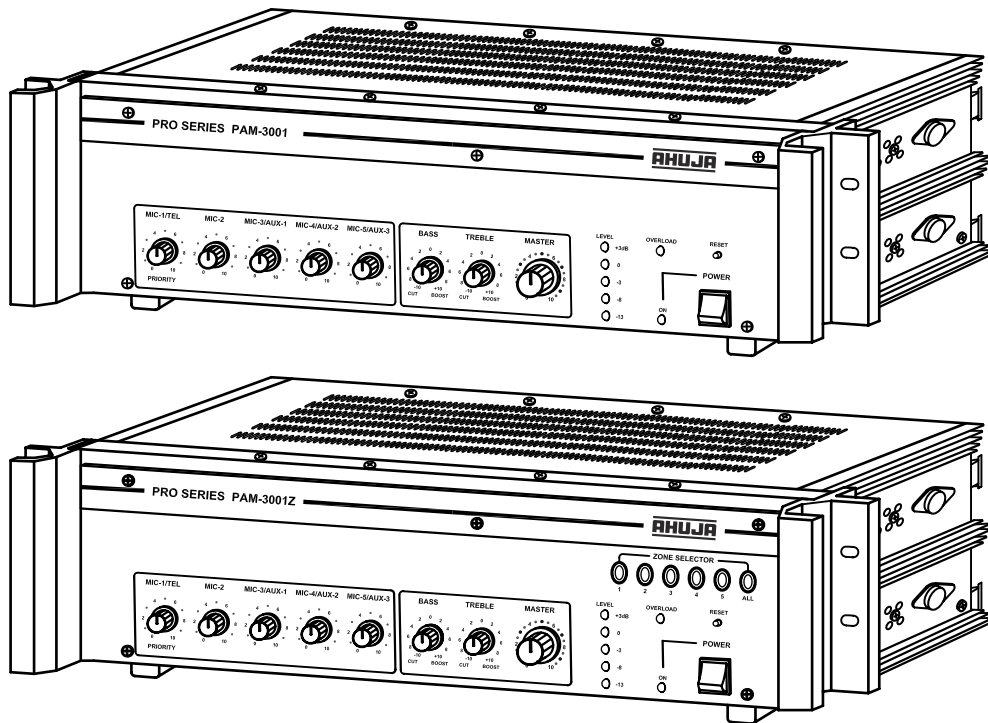


PAM-3001

PAM-3001Z



- ◆ Thank you for purchasing the AHUJA PA Amplifier.
- ◆ Please read this manual thoroughly before making connections and turning on the power. Following the instructions in this manual will enable you to obtain optimum performance from your new AHUJA PA Amplifier.
- ◆ Please retain this manual for future reference.

• Safety Instructions

Read the Instructions: Please read all the instructions in this section carefully before installation or use of the product. All the safety instructions must be followed.

Retain the Instructions: Please retain this Instruction Manual for future reference.



This symbol, wherever it appears, alerts you to the presence of uninsulated hazardous voltage that may be sufficient to constitute a risk of electric shock. External wiring to any terminal marked with this symbol must be done by a trained and instructed person only.



This symbol, wherever it appears adjacent to a component, alerts you that the concerned component can only be replaced by another of the exact same specifications.

WARNING

- To reduce the risk of electric shock, do not remove the top cover. No user serviceable parts inside. Refer all servicing to qualified personnel only.
- Before replacing any fuse, make sure the set is switched off and disconnected from the AC mains or any other power source. Replace a fuse only with another of exactly same specification.

CAUTIONS

Water & Moisture: To reduce the risk of fire or electrical shock, do not expose this set to rain or moisture. Do not use this set near water or in a wet location. Do not keep any object filled with liquid, such as a vase, on top of this set. Do not insert or remove the AC mains plug with wet hands.

Power Source: The voltage & frequency of the AC mains supply, and the voltage of the external battery, (if applicable) to which this set can be connected, is marked on the rear panel of the set. Do not connect this set to any power source other than those specified on the rear panel.

Power Cord Protection: Do not cut, kink, damage or modify the AC power cord supplied with this set. Keep the AC power cord away from heaters and harmful chemicals. Do not keep any heavy object on the power cord.

Operation on Generator: When operating this set on a generator, make sure the set is switched off till the generator voltage has stabilized.

Ventilation: This set should be situated so that its location or position does not interfere with its proper ventilation. Do not cover the ventilation holes / slots. Do not insert or drop anything into the ventilation holes / slots.

Stability: This set must be kept in a stable and flat horizontal position, and never in a tilted position. Do not place this set on an unstable stand, tripod, bracket or mount. Do not use attachments which are not supplied or explicitly recommended by the manufacturer.

Cover Strip: The cover strip of the 100V / 70V audio output terminal strip, and of any other high voltage output terminal strip, must be replaced after making connections. Failure to do so may result in exposure to hazardous voltages.

Earthing: This set must be earthed properly before use. A wire from the Earth terminal on the rear panel must be connected to electrical earth.

Cleaning: Disconnect this equipment from the AC mains and external battery before cleaning. Clean with a damp cloth, but do not allow any liquid to enter the set. Do not clean with liquids or aerosols.

Exposure to Heat: Do not touch the heatsinks while the set is working.

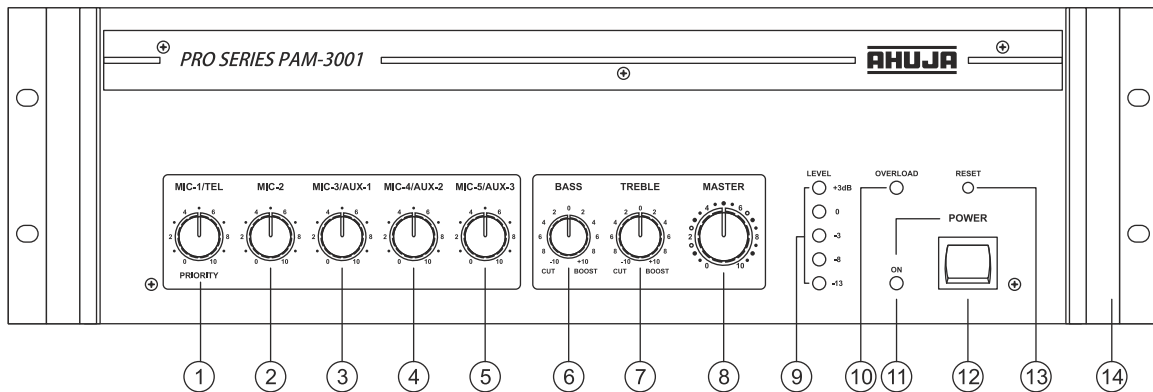
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• Features/General Description of Product

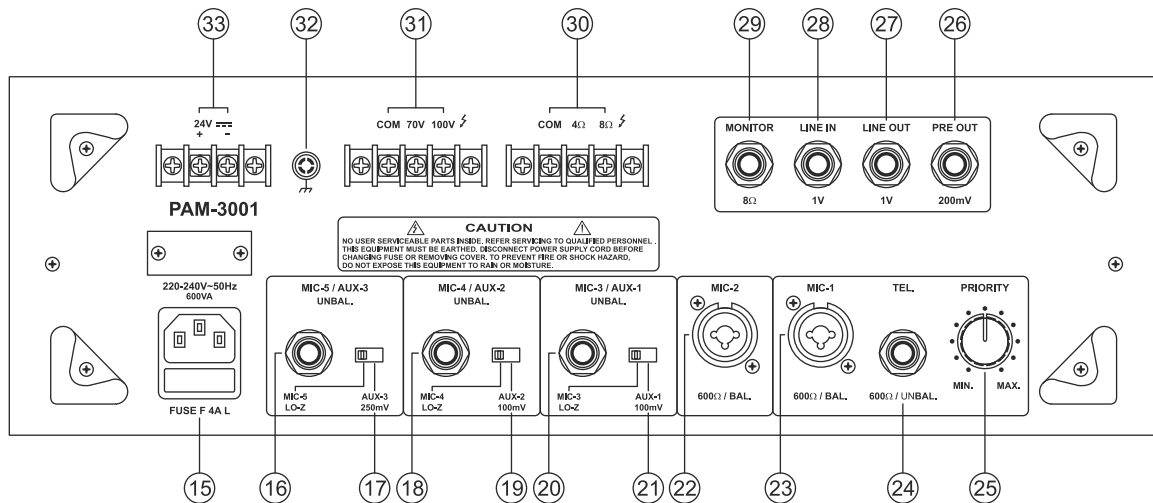
- Designed for use in a wide variety of PA applications.
- Two Balanced Mic inputs through Combo (Female XLR socket cum ¼" Stereo jack socket) connectors.
- Three Unbalanced Mic inputs alternate to three Aux inputs.
- Mic-1 and Telephone input provided with Voice- Operated PRIORITY over all other programs.
- Preamp & Line output for recording the program & connecting to booster amplifier.
- Line input for connecting to an external audio mixer.
- Circuit protector device safeguards against overload and short circuit.
- Both PAM-3001 & PAM-3001Z amplifiers have been designed for both tabletop use & 19" rack mounting.
- PAM-3001Z has the additional feature of distributing the total load of 100V line amongst 5 speaker zones. The zones are selectable through a zone selector switch.
- Ease of operation, combined with service accessibility have been optimized in the design.

• Front Panel Controls & Features (PAM-3001)



1. **MIC-1 / TEL Volume Control**
2. **MIC-2 Volume Control**
3. **MIC-3 / AUX-1 Volume Control**
4. **MIC-4 / AUX-2 Volume Control**
5. **MIC-5 / AUX-3 Volume Control**
6. **BASS Control**
For cutting or boosting the signal level of low frequencies.
7. **TREBLE Control**
For cutting or boosting the signal level of high frequencies.
8. **MASTER Volume Control**
For adjustment of the overall volume level from the amplifier.
9. **LED Array**
This indicates the output level of the amplifier.
10. **OVERLOAD LED**
This LED glows when the circuit protector trips.
11. **POWER LED**
This LED glows when the amplifier is switched ON.
12. **POWER Switch**
Push the top part of the knob to switch the amplifier ON. Push the bottom part of the knob to switch the amplifier OFF.
13. **RESET button**
This button pops out when the circuit protector trips. Rectify the cause and press the RESET button for resetting normal operation of the amplifier.
14. **Rack Mounting Brackets**

• Rear Panel Controls & Features (PAM-3001)



15. AC Inlet Socket With Built-in Fuse Rating 4 AMP. 250V (F 4A L)

Connect the provided AC Mains cable in this socket for AC mains operation. The built-in fuse protects the amplifier from any excessive current flow.

16. MIC-5 / AUX-3 Input Jack Socket

For accepting unbalanced signal from either low impedance microphone or an auxiliary source like CD player, Keyboard etc.

17. MIC-5 / AUX-3 Selector Switch

18. MIC-4 / AUX-2 Input Jack Socket

For accepting unbalanced signals from either a low impedance microphone or an auxiliary source line Cassette Player etc.

19. MIC-4 / AUX-2 Selector Switch

20. MIC-3 / AUX-1 Input Jack Socket

For accepting unbalanced signals from either a low impedance microphone or an auxiliary source like Tuner etc.

21. MIC-3 / AUX-1 Selector Switch

22. MIC-2 Input Combo Socket

For accepting balanced signal from a low impedance microphone through a male XLR plug as well as a 1/4" stereo plug.

23. MIC-1 Input Combo Socket

24. TELEPHONE Input Jack Socket

For connecting to the audio output of an EPABX

to enable connected extensions use their telephone sets for paging and making announcements. Either MIC-1 or TEL. input usable at a time.

25. PRIORITY Level Control

For adjusting attenuation level of music program through voice operated built-in priority circuit of MIC-1 / TEL.

26. PRE-AMPLIFIER OUTPUT Jack Socket

For connecting to AUX input of another amplifier or a cassette recorder for recording purpose.

27. LINE Output Jack Socket

For connecting to a booster amplifier to obtain combined higher power output.

28. LINE Input Jack Socket

For connecting an external Mixer for enhancing the number of inputs.

29. MONITOR Output Jack Socket

For connecting 8Ω monitor speaker.

30. SPEAKER Terminal Block (4Ω and 8Ω)

For connecting low impedance speakers.

31. SPEAKER Terminal Block (70V, 100V)

For connecting speakers with 100V line matching transformers.

32. EARTH Terminal

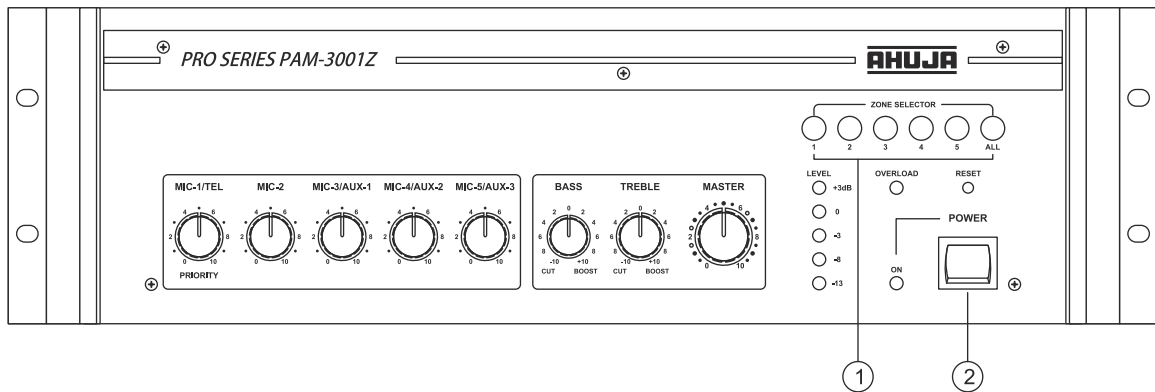
33. BATTERY Terminal Block

For connecting two 12V Car Batteries in series (which becomes 24V) as standby power source.

Caution

- The equipment must be earthed properly before operating it to avoid electric shock. A wire from the Earth Terminal must be connected to electrical earth for safe operation.

• Front & Rear Panel Controls & Features (PAM-3001Z)

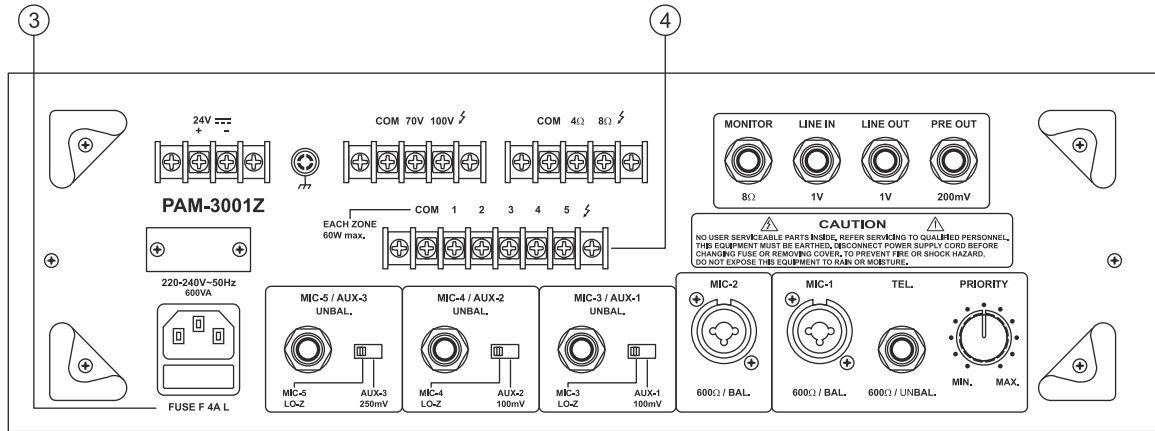


1. ZONE SELECTOR Switches

For individual switching of 5 different zones through selector switches marked 1 to 5. Zone selector switch marked 'ALL' facilitates combined switching of all 5 zones.

2. POWER Switch

Push the top part of the knob to switch the amplifier ON. Push the bottom part of the knob to switch the amplifier OFF.



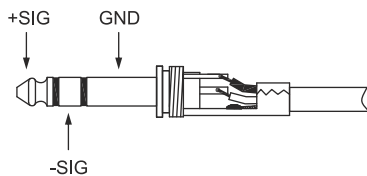
3. AC Inlet Socket With Built-in Fuse Rating 4 AMP. 250V (F 4A L)

Connect the provided AC Mains cable in this socket for AC mains operation. The built-in fuse protects the amplifier from any excessive current flow.

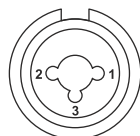
4. Zone Terminal Block

For connecting speakers (with 100V line matching transformers) in 5 different zones.

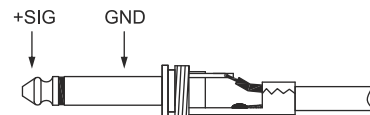
• Plug Wiring



Mic (Balanced)



PIN 2 : +SIG
PIN 3 : -SIG
PIN 1 : GND

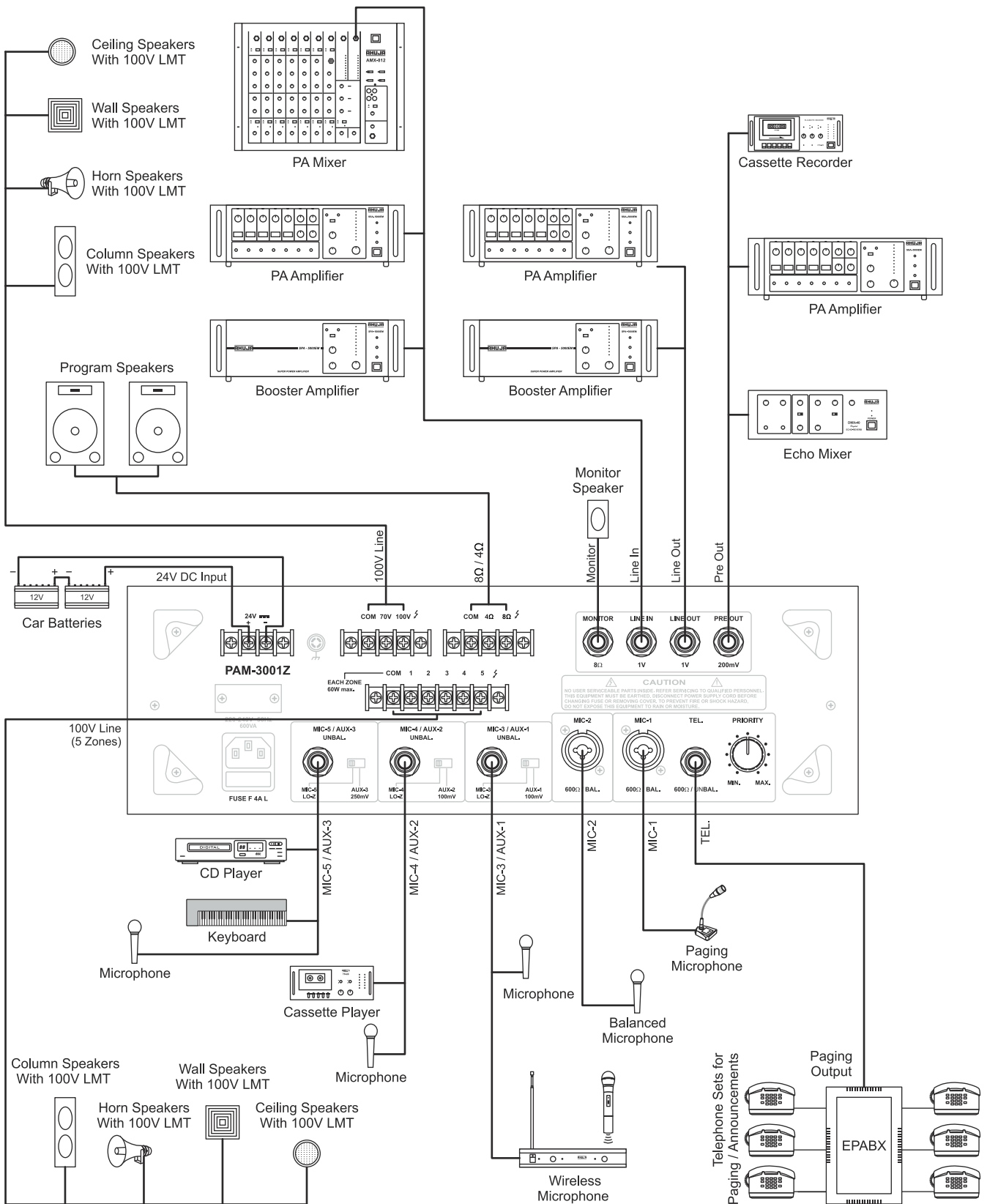


Mic (Unbalanced), AUX, TEL, PREOUT, LINE OUT, LINE IN & MONITOR

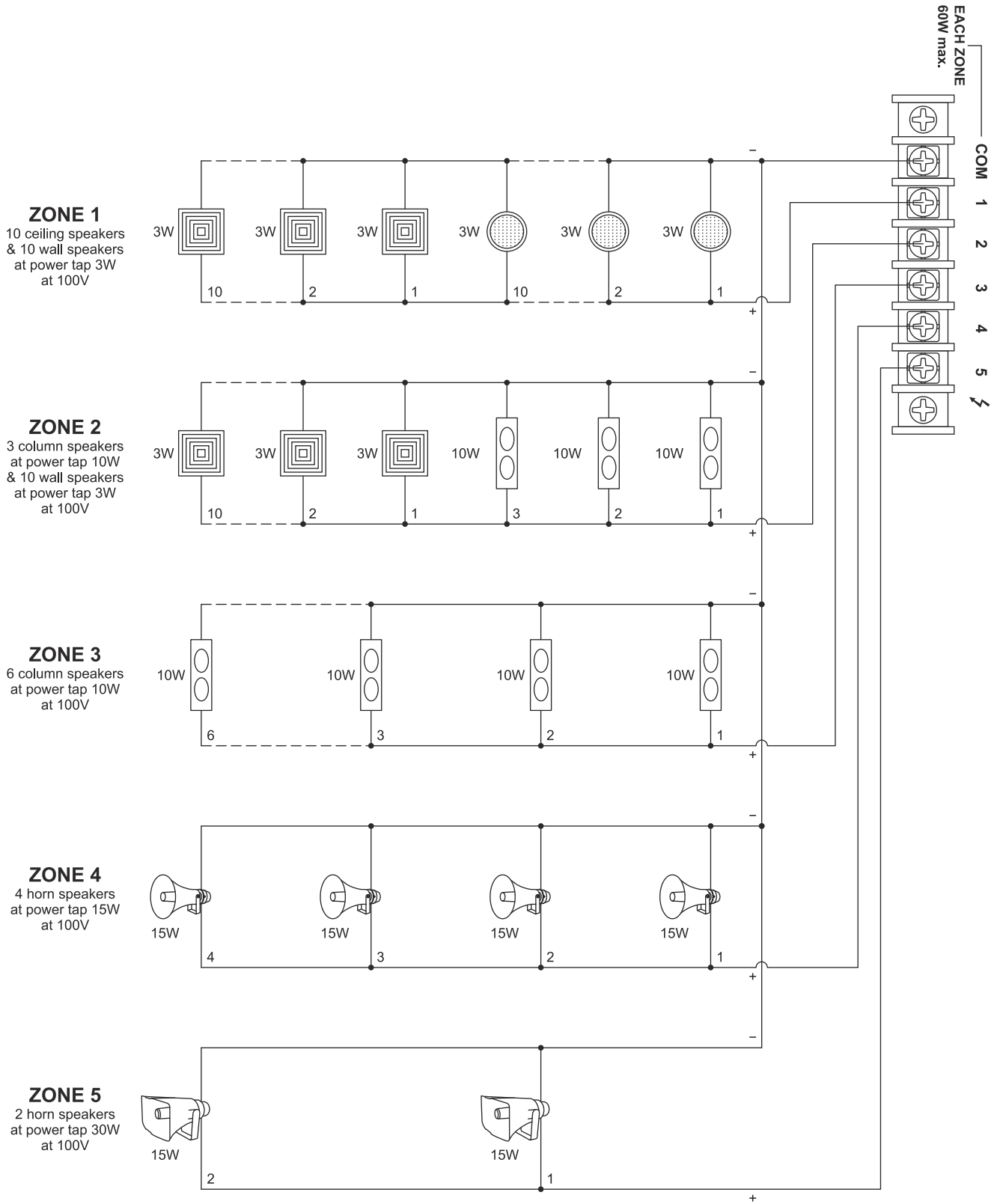
• Interconnections

- The amplifier can be placed as a tabletop unit or can be installed into standard 19" rack. For rack mounting, three rack spaces are required. Additional space should remain above and below the amplifier to ensure sufficient ventilation. In order to avoid to a top load of the rack, the amplifier must be inserted in the lower range of the rack.
- The amplifier must be powered through an AC earthed mains outlet.
- All connections must only be carried out or changed with the amplifier switched OFF.
- The amplifier may be operated from a DC supply of 24 Volts (two car batteries connected in series).
- To avoid loud switching noise, always switch ON the power amplifier after all other units of the audio system have been switched ON. After operation switch it OFF first and then the other units.
- The connection diagram on the next page, displays the typical types of input sources (Keyboard, Cassette Player, Mixer, CD Player etc.) and speakers (Wall, Ceiling, Box, Horn, Column) which can be connected to the amplifier. For correct connections and operation check the specifications of the connected equipment.

• Interconnections...



• Typical Zone Selector Application - PAM-3001Z



• Specifications

MODEL	PAM-3001 / PAM-3001Z	
Power Output	415W RMS Max. 325W RMS at 10% THD 300W RMS at 5% THD 275W RMS at 2% THD	
Output Regulation	≤ 2dB no load to full load at 1kHz	
Input Channels	1 × Telephone 150mV / 10kΩ (thru' isolation x'fmr) 2 × Mic 1.0mV / 2kΩ (Balanced) 3 × Mic 0.65mV / 4.7kΩ (Unbalanced) 2 × Aux-1 & 2 100mV / 470kΩ 1 × Aux-3 250mV / 470kΩ Line Input 1V / 50kΩ (Priority provided on Mic-1 / Telephone)	
Frequency Response	50–15,000Hz ±3dB	
Signal to Noise Ratio	60dB	
Tone Controls	Bass: ±10dB at 100Hz Treble: ±10dB at 10kHz	
Preamp Output	200mV / 600Ω	
Line Output	1V / 1kΩ	
Monitor Output	2W Max.	
Output Taps for Speaker Matching	4Ω & 8Ω (for direct connections) 70V & 100V Line (for use with LMT)	
Zone Selection	—	5 independent zones at 100V line output. Maximum capacity of each zone is 60W.
Power Supply	AC: 220-240V 50/60Hz; DC: 24V (2 × 12V Car Battery)	
Protection	AC: Fuse 4Amp. (F 4A L); DC: 20 Amp. Circuit Protector	
AC Power Consumption	600 VA	
DC Power Consumption	7A	
Dimensions	W482 × H133 × D390 mm	
Weight	19.8 kg approx.	

- Design and Specifications are subject to change without notice owing to continuous product upgradation.
- Technical specifications are subject to production tolerances.

• For Your Records

- Model No.
- Serial No.
- Dealer's Name
- Dealer's Phone No. Fax No.
- Date of Purchase

Model and Serial Nos. are printed on the rear panel of the product.

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