



Please follow the instructions in this manual to obtain the optimum results from this unit.
We also recommend that you keep this manual handy for future reference.

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1. SAFETY PRECAUTIONS

- Be sure to read the instructions in this section carefully before use.
- Make sure to observe the instructions in this manual as the conventions of safety symbols and messages regarded as very important precautions are included.
- We also recommend you keep this instruction manual handy for future reference.

Safety symbol and message conventions

Safety symbols and messages described below are used in this manual to prevent bodily injury and property damage which could result from mishandling. Before operating your product, read this manual first and understand the safety symbols and messages so you are thoroughly aware of the potential safety.

WARNING

Indicates a potentially hazardous situation which, if mishandled, could result in death or serious personal injury.

CAUTION

Indicates a potentially hazardous situation which, if mishandled, could result in moderate or minor personal injury, and/or property damage.

Warning

When installing the unit

- Do not expose the unit to rain or an environment where it may be splashed by water or other liquids, as doing so may result in fire or electric shock.
- Use the unit only with the voltage specified on the unit. Using a voltage higher than that which is specified may result in fire or electric shock.
- Do not cut, kink, otherwise damage nor modify the power supply cord. In addition, avoid using the power cord in close proximity to heaters, and never place heavy objects (including the unit itself) on the power cord, as doing so may result in fire or electric shock.
- Be sure to replace the unit's terminal cover after connection completion. Because high voltage is applied to the speaker terminals, never touch these terminals to avoid electric shock.
- Be sure to ground to the safety ground (earth) terminal to avoid electric shock. Never ground to a gas pipe as a catastrophic disaster may result.
- Avoid installing or mounting the unit in unstable locations, such as on a rickety table or a slanted surface. Doing so may result in the unit falling down, causing personal injury and / or property damage.

When the unit is in use

- Should the following irregularity be found during use, immediately switch off the power, disconnect the power supply plug from the AC outlet and contact your nearest dealer. Make no further attempt to operate the unit in this conditions this may cause fire or electric shock, ...
 - If you detect smoke or a strange smell coming from the unit.
 - If water or any metallic object gets into the unit.
 - If the unit falls, or the unit case breaks.
 - If the power supply cord is damaged (exposure of the core, disconnection, etc)
 - If it is malfunctioning (no tone sounds)

- To prevent a fire or electric shock, never open or remove the unit case as there are high voltage components inside the unit. Refer all servicing to your nearest dealer.
- Do not place cups, bowls, or other containers of liquid or metallic objects on top of the unit. If they accidentally spill into the unit, this may cause a fire or electric shock.
- Do not insert nor drop metallic objects or flammable materials in the ventilation slots of the unit's cover, as this may result in fire or electric shock.

Caution

When installing the unit

- Never plug in nor remove the power supply plug with wet hands, as doing so may cause electric shock.
- When unplugging the power supply cord, be sure to grasp the power supply plug; never pull on the cord itself. Operating the unit with a damaged power supply cord may cause a fire or electric shock.
- When moving the unit, be sure to remove its power supply cord from the wall outlet. Moving the unit with the power cord connected to the outlet may cause damage to the power cord, resulting in fire or electric shock. When removing the power cord, be sure to hold its plug to pull.
- Do not block the ventilation slots in the unit's cover. Doing so may cause heat to build up inside the unit and result in fire.
- Avoid installing the unit in humid or dusty locations, in locations exposed to the direct sunlight, near the heaters, or in locations generating sooty smoke or steam as doing otherwise may result in fire or electric shock.

When the unit is in use

- Should the following irregularity be found during use, immediately switch off the power, disconnect the power supply plug from the AC outlet and contact your nearest dealer. Make no further attempt to operate the unit in this conditions this may cause fire or electric shock, ...
- To prevent a fire or electric shock, never open or remove the unit case as there are high voltage components inside the unit. Refer all servicing to your nearest dealer.
- Do not place cups, bowls, or other containers of liquid or metallic objects on top of the unit. If they accidentally spill into the unit, this may cause a fire or electric shock.
- Do not insert nor drop metallic objects or flammable materials in the ventilation slots of the unit's cover, as this may result in fire or electric shock.
- Do not place heavy objects on the unit as this may cause it to fall or break which may result in personal injury and/or property damage. In addition, the object itself may fall off and cause injury and / or damage.
- Make sure that the volume control is set to minimum position before power is switched on. Loud noise produced at high volume when power is switched on can impair hearing.
- Do not operate the unit for an extended period of time with the sound distorting. This is an indication of a malfunction, which in turn can cause heat to generate and result in a fire.
- Contact your dealer as to the cleaning. If dust is allowed to accumulate in the unit over a long period of time, a fire or damage to the unit may result.
- If dust accumulates on the power supply plug or in the wall AC outlet, a fire may result. Clean it periodically. In addition, insert the plug in the wall outlet securely.
- Switch off the power, and unplug the power supply plug from the AC outlet for safety purposes when cleaning or leaving the unit unused for 10 days or more. Doing otherwise may cause a fire or electric shock.

2. GENERAL DESCRIPTION

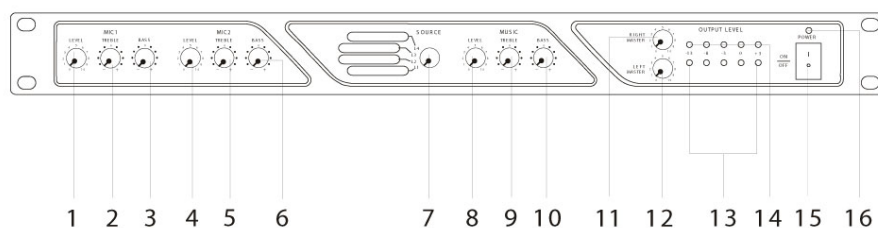
This series two-channel pre-amplifier with the latest styles to meet the needs of small and medium sized public address system. Two-channel pre-amplifier has 2 inputs at the same time, enhance the audio signal simultaneously . Two-channel audio pre-amplifier is the connector of all audio sources (including common sources such as CD drive, modem, sound recording deck , MP3 players , special audio alarm and a variety of microphones) and the power amplifier devices. The volume of each input source can be adjusted independently,with priority ranking function,which can require the input source to priorities. Two-channel pre-amplifier has sound quality control functions,such as through its ring tone control circuit or other control circuit, to regulate and control the frequency characteristics of signals,to play modified and beautify the sound and meet the requirements of the listener's preferences.

3. FEATURES

- Standard chassis design, 1U aluminium alloy; light equipment, simple operation, artistic and practical.
- Each input independent volume and treble /bass volume adjustment.
- MIC 1-2 balanced microphone inputs with +48 phantom power switch and gain adjustment.
- With alarm generator, to provide for the paging tone.
- LINE 1-4 line input with gain adjustment.
- REC has a left and right channel audio input and balance left and right channels output control.
- MIC 1 ~ MIC 2 input priority to other.

4. NOMENCLATURE AND FUNCTIONS

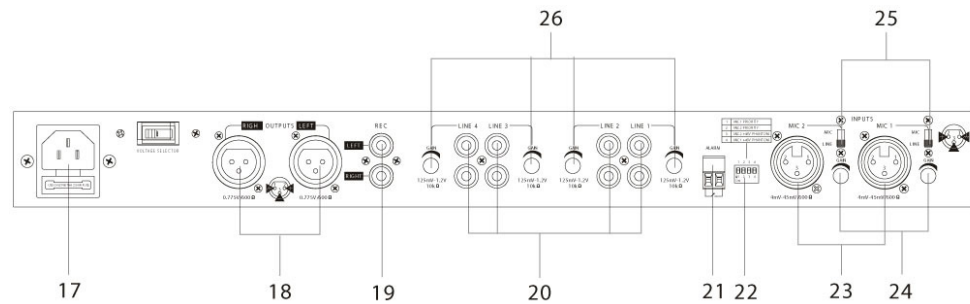
a. Front panel



1. **MIC1 volume control**
2. **MIC1 treble adjustment** : The treble response, clockwise rotation, MIC1 increase treble output , whereas reduced.
3. **MIC1 bass tone adjustment** : Adjust the bass response , clockwise rotation, MIC1 increase treble output, whereas reduced.
4. **MIC2 volume control**
5. **MIC2 treble adjustment**
6. **MIC2 bass adjustment**
7. **Line channels selector (L1 ~ L4)**
8. **Line volume control**
9. **Line treble control**
10. **Line bass control**
11. **Left and right volume control**
12. **Left channel control**

- 13. Left channel level indicator
- 14. Right channel level indicator
- 15. Power switch
- 16. Power LED (blue)

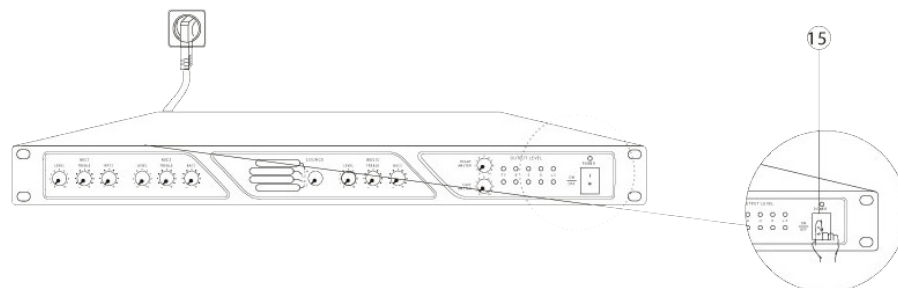
b. Rear panel



- 17. ~ 230V / 50 Hz power input
- 18. Left and right channel line outputs (XLR)
- 19. Left and right channel audio input (REC)
- 20. Line input (LINE1 ~ LINE2)
- 21. Alarm signal input circuit
- 22. MIC (1 ~ 2) +48 V phantom power dial the code switch and priority function control
- 23. MIC (1 ~ 2) phantom microphone input
- 24. MIC (1 ~ 2) GAIN : Gain adjustment
- 25. MIC (1-2) output switch
- 26. LINE (1 ~ 4) GAIN : Gain adjustment

5. OPERATION ILLUSTRATION

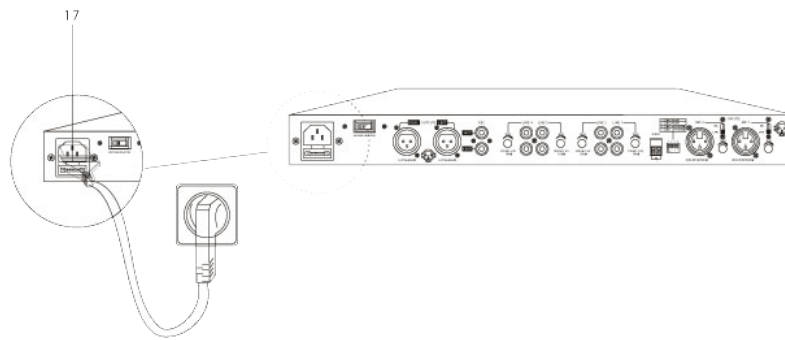
a. Power LED and power switch



When the power switch to “ON” , power light becomes blue.
 When the power switch to “OFF” , power light extinguish.

Note : In order to work properly, equipment must be confirmed in a normal power state. If the machine fails, please contact the vendor.

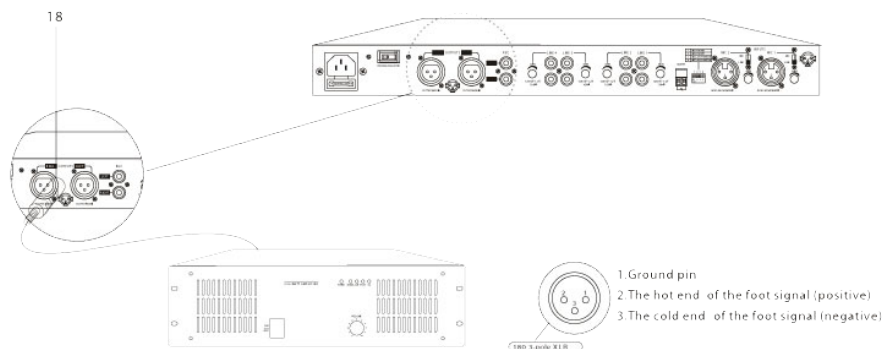
b. Power input



Power is to provide energy to equipment, must be safe use of power supply, don't use it, please pull power.

Note : When used it, must use the security power input within the stipulated scope, avoid causing accidents.

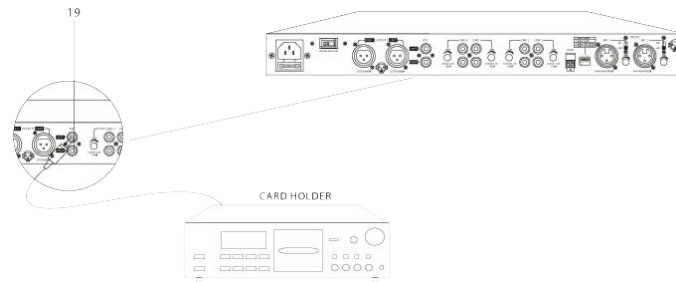
c. Channel line jack output (XLR)



L/R OUTPUTL / R OUTPUT line out, two channel selectable. All output should be connected to the jack on the rear panel of the machine. Volume control is done by the left and right volume knobs and each with a row of signal lights, can understand the level of the signal outputs. This feature allows pure power amp to work as pre-amplifier with the extensions amplifier feature.

Note : L / R OUTPUT line out, you must first volume to mid-range position, to avoid the sound exposure.

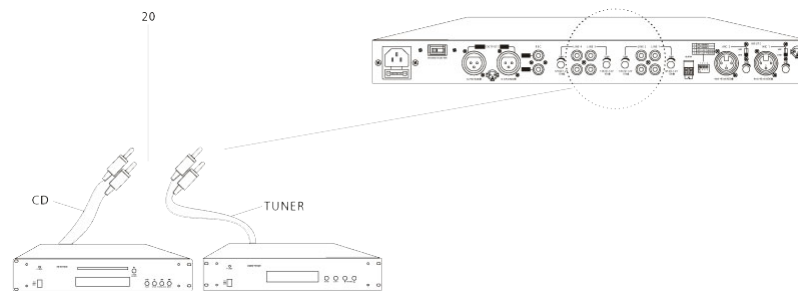
d. REC audio input interface



REC recording deck input interface, Left and right channel selectable. REC audio input interfaces to deck machine.

Note : When REC inputs, you must first volume to mid-range position, to avoid the sound exposure.

e. LINE (1~4) line inputs

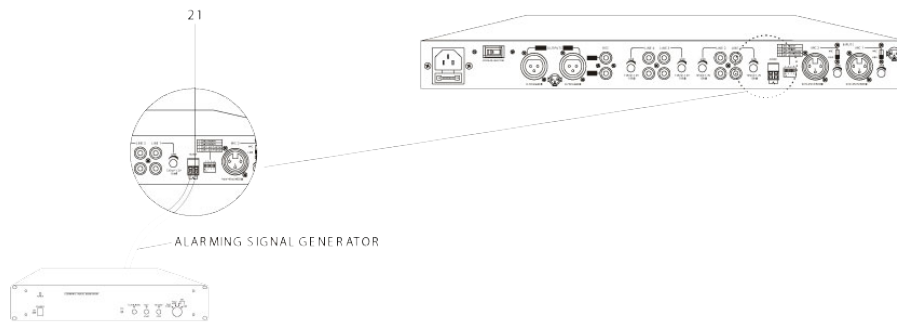


LINE (1 ~ 4) line input , adjustable L (1 ~ 4) switches and control the LINE (1 ~ 4) line inputs. Line input signal can be adjusted by the volume knobs and the BASS/TREBLE control. At the same time, LINE (1 ~ 4) line input, you can adjust the GAIN volume. By adjusting the GAIN size, you can control the input gain between 20 ~ 0 dB. LINE (1 ~ 4) line in the formula audio line input for connecting CD / MP3 / TUNER equipment running.

Note :

1. When using the line input, you must first volume to mid-range position, to avoid the sound exposure
2. Please avoid multiple audio input at the same time or it will cause noise.

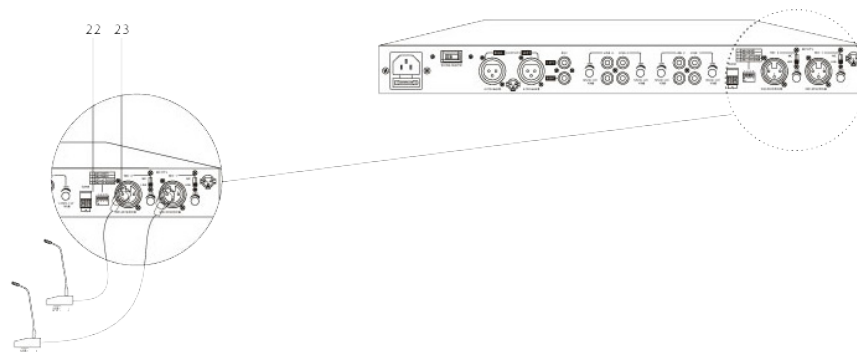
f. Alarm signal input circuit



Alarm signal input circuit, when the circuit is disconnected and closed signal, alarm will be triggered. The volume of the alarm depends on the input level.

Note : Please turn the volume to mid-range position, to avoid the sound exposure.

g. MIC1 / MIC2 input and stubs address code switch

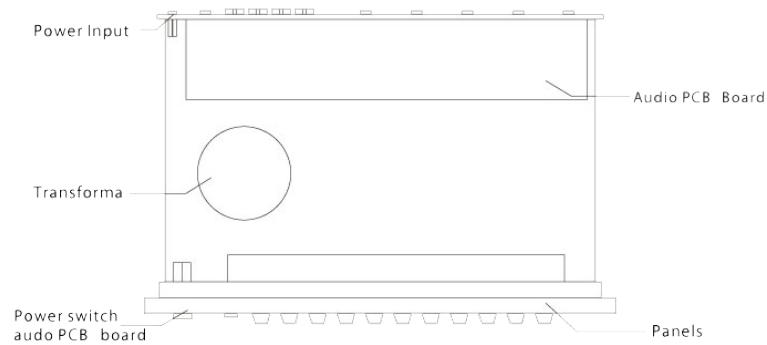


MIC1 / MIC2 balanced microphone input, volume size is determined by the panel MIC 1/ MIC 2 knob control, combined with BASS / TREBLE adjust the volume knob to achieve the desired acoustic effect. MIC1 / MIC2 Use a balanced microphone input, adjustable phantom address priorities and can be manually controlled. When the address code (1,2) switch, open the "1" address code, means the MIC 1 has priority over MIC2 and LINE inputs 1-4 input. Open the "2" address code, means MIC 2 has priority over MIC1. When the +48 phantom power address code (3,4) switch, open the "3" address code, said the MIC 2 balanced microphone with power supply to the dynamic microphones;; when the +48 phantom switch, open the "4" address code, MIC 2 balanced microphone without power supply to the dynamic microphones. Besides, MIC (1 ~ 2) the has the gain control. GAIN control is between 20 ~ 60dB.

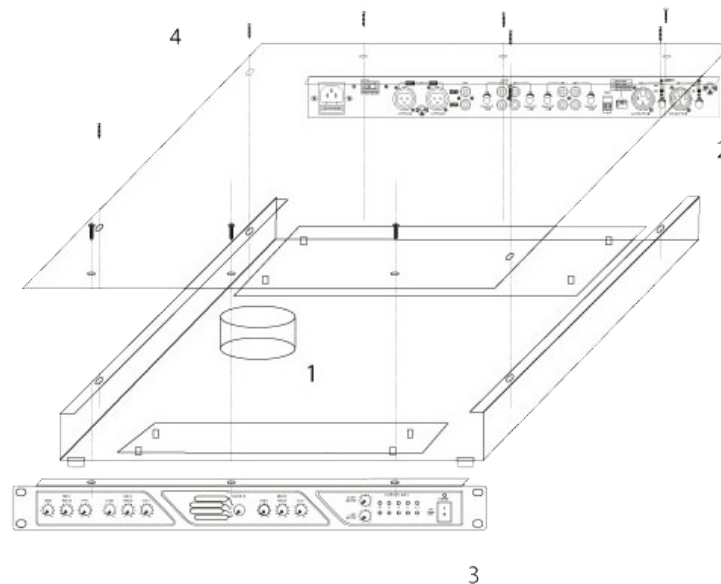
Note :

1. When using the microphone input, you must first volume to mid-range position, to avoid sending the sound exposure.
2. Microphone input priority must first adjust address code. Otherwise, the priority can not be controlled.
3. Must ensure that the microphone is fully inserted, otherwise the call function can not be achieved.

6. EQUIPMENT INNER DRAWING



7. INSTALLATION STEPS

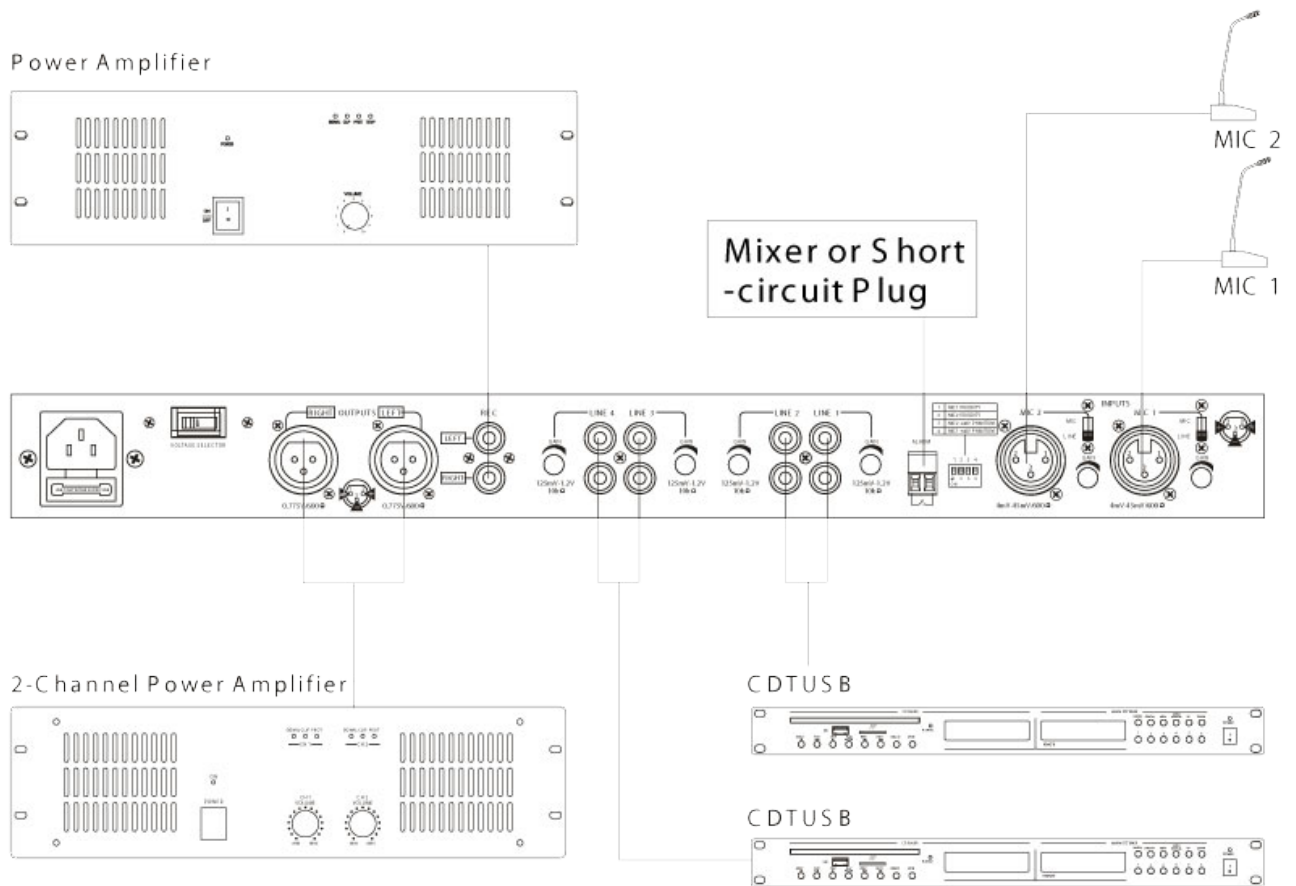


1. Firstly, install board inside the machine with wiring.
2. After install the back panel and floor with screws.
3. Then install equipment panel.
4. Finally, to install cover.

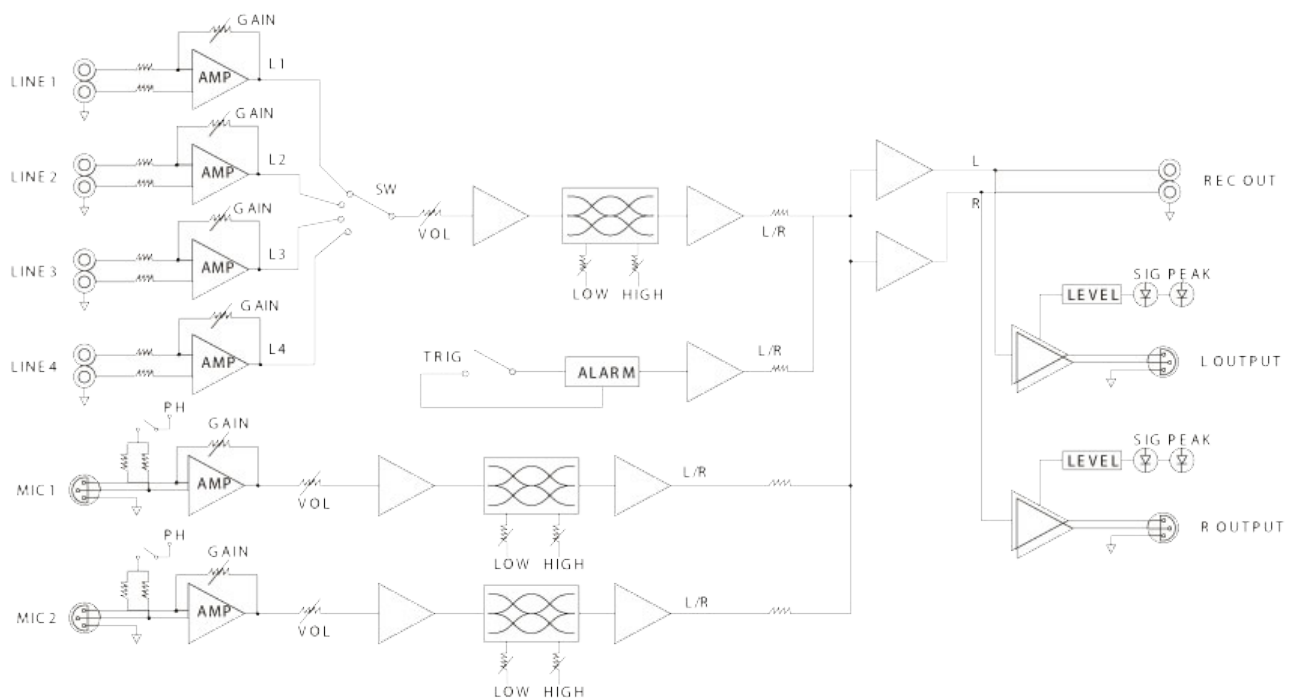
Note :

1. The equipment adopts 4 x 4 mm screws.
2. When installation, keep equipment clean.
3. Undertake certain temperature conditions, installing equipment.

8. CONNECTION DIAGRAM



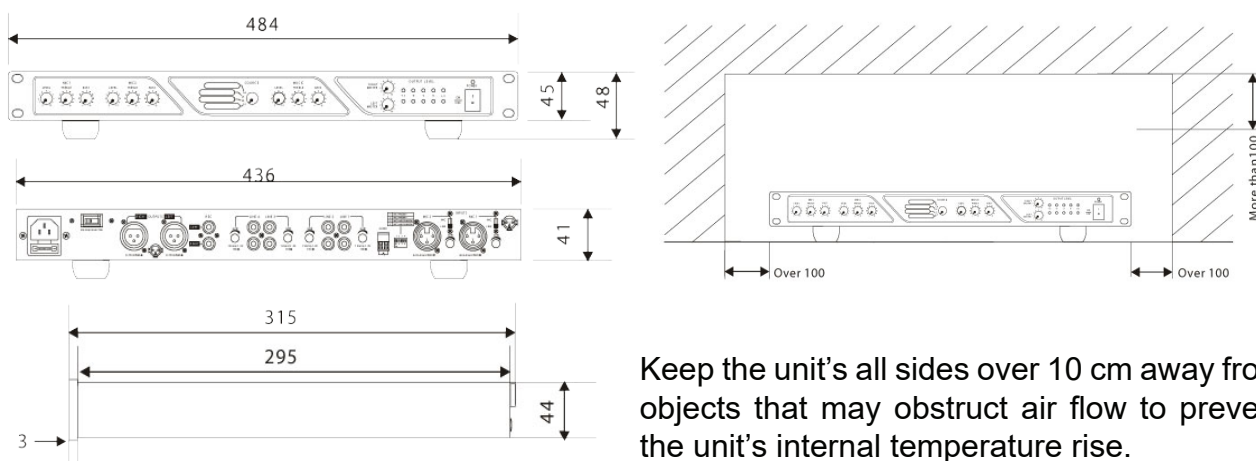
9. BLOCK DIAGRAM



10. SPECIFICATIONS

Frequency response	20 Hz - 20 kHz +/- 0.5 dB
Sensitivity	195 mV (-12 dBu) to 2.0V (+8 dBu)
Input impedance	47k ohms
Input gain control	20 dB range
Distortion	<0.05% 20 Hz - 20 kHz
Noise	-90 dB A weighted (0 dB gain)
Equalisation	TREBLE : 10 dB / 10k Hz BASS : +/- 10 dB / 100 Hz
Microphone 1 - 2 inputs	
Frequency response	100 Hz / -3 dB (filter) 20 kHz 0.5 dB
Distortion	<0.05% 20 Hz - 20 kHz
Gain range	10 dB - 50 dB
Input impedance	> 2k ohms (balanced)
Phantom power	+15V (PCB jumper for on / off)
Equalisation	TREBLE : +/- 10 dB / 5 kHz BASS : +/- 10 dB / 100 Hz
Noise	-65 dB A weighted
Outputs	
Balanced zone outputs	775 mV (0 dBu) 3 pin "Phoenix" type connector
Max. output level	+20 dBu (7.75V)
Min. load impedance	600 ohms
REC output level	-12 dBu (200 MV)
Else	
Power input	~230V / 50 Hz
Fuse rating	Z8 : 230V T125 mA H 115V T250 mA H
Dimensions	484 x 300 x 44 mm (1U)
Weight	3.9 kg

11. DIMENSIONAL DIAGRAM



LINEARSOUND



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