

Instruction Manual



SIP Network Amplifier

Before using this product, it is very important to carefully read and understand all relevant safety information about this product. Reading and understanding these safety messages can help reduce the risk of personal injury or product damage!

Safety Precautions

- Please read this manual carefully before use.
- Pay attention to the safety symbols and important warnings in this manual.
- It is recommended that you keep this manual for future reference.
- The safety symbols and warnings shown in this manual are to prevent personal injury and property damage caused by improper operation. Please read this manual carefully before using the product and make sure you understand the meanings of various safety symbols and warnings to be fully aware of potential hazards.

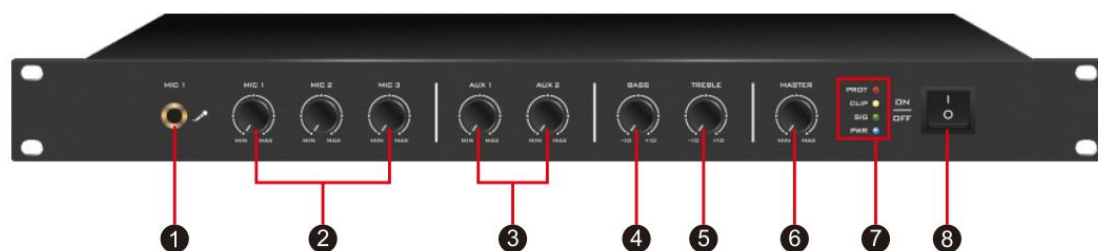
Warning: Improper use may cause personal injury, property damage, and even death.

- When installing this machine:
- Please use it within the specified voltage range of this machine. Using a higher voltage may cause electric shock or fire.
- Never use a frayed, twisted, damaged power cord or replace the power cord casually. When using this machine, keep it away from heaters to avoid fire or property damage.
- Never place heavy objects on this machine to prevent equipment damage, which may lead to electric shock or fire.
- Since the 70V/100V output terminals of this machine can cause harm to the human body, never touch these connection points to avoid electric shock. After the product installation and debugging are completed, please make sure that the high - voltage part is covered with a terminal protective cover, and when these terminals are connected to external wires, the installation and connection must be carried out under the guidance of a professional.
- Please install this machine at a place that can bear its weight or on a stable tabletop. Do not install or place it in an unstable place (such as a shaking table or an uneven surface) to avoid personal injury or property damage when the machine falls.
- Never insert or pull out the plug with wet hands to avoid electric shock accidents.
- When pulling out the plug, make sure to pull the plug, not the power cord directly.
- When moving the machine, be sure to pull out the power plug first. Moving the machine with the plug may cause fire or electric shock.
- Do not cover the ventilation holes of the machine to prevent the internal temperature of the machine from getting too high and causing a fire.
- Avoid installing this machine in a humid, dusty place, in direct sunlight, near a heater, or in a place with steam, such as a bathroom, to avoid fire or electric shock.

Features:

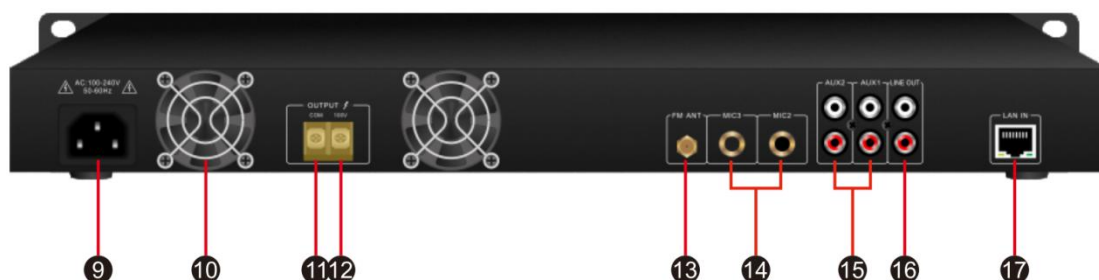
- Standard 19 - inch rack design, with a black anodized aluminum brushed panel and professional mechanical assembly technology, giving the machine a very high - end appearance.
- It adopts embedded computer and DSP audio processing technology, and a high - speed industrial - grade single - chip microcomputer chip. The startup time is less than 1 second.
- It has 1 built - in network hardware audio decoding module to achieve network - based audio signal transmission.
- It uses CLASS - D power amplifier circuit technology and a full - loop feedback network to further reduce the distortion of the power amplifier. It provides stable and flexible control during high - power output while maintaining excellent sound quality integrity.
- It has 2 line (AUX) and 3 microphone (MIC) input interfaces, with independent volume and treble - bass adjustment potentiometers, and supports the local paging function when the network is disconnected.
- It has 2 audio signal auxiliary output interfaces, which can be used to expand external power amplifiers. The standard RCA jacks make wiring connections very convenient.
- It has built - in intelligent power management. When there is no music or call, it automatically cuts off the power of the power amplifier, and when there is a signal, it automatically turns on the power of the power amplifier. It also supports the function of pre - turning on the power amplifier through software programming.
- It uses dual PFC switching - mode power supply technology to improve the performance of the power amplifier and reduce power current consumption. It supports a wide voltage operating range (AC 90V - AC 265V), meeting the global power supply requirements and achieving energy conservation and environmental protection.
- It supports the soft - start function when powering on to prevent the machine from drawing a large current from the power grid when starting up, reducing interference to other electrical equipment.
- The intelligent system automatically controls the heat dissipation design according to temperature changes. The fan has low noise and high heat dissipation efficiency.
- It has a built - in intelligent clipping distortion and over - current voltage - limiting system to protect the speaker unit.
- It supports the preset reduction function of mute intensity and the preset function of background accompaniment. It also supports status light display, including level indicator lights, protection indicator lights, and standby indicator lights.
- The standby power consumption of the whole machine is less than 10W, meeting the national environmental protection and energy - saving certification standards.
- It is a digital product, which is convenient for expansion, not limited by geographical location, and does not require additional computer room management equipment. It adopts the design concept of sharing the network and eliminating the need for line construction, making installation simple.
- It has perfect and reliable safety protection measures and working status indication (soft - start, DC, short - circuit, over - heat, over - load, and limit - amplitude multiple intelligent detection and protection systems), allowing users to use it with confidence.

Front Panel Diagram



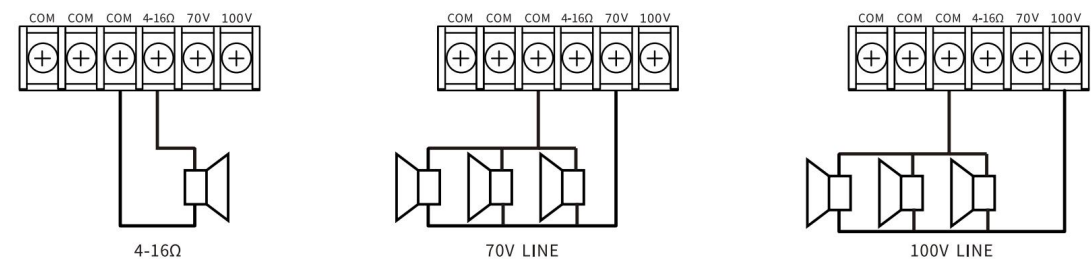
- ① MIC1: Microphone Input
- ② MIC1/MIC2/MIC3: Microphone Volume Control (MIC1/MIC2/MIC3)
- ③ AUX1/AUX2: Auxiliary Volume Control (AUX1/AUX2)
- ④ Bass: Adjust the bass effect. Rotate clockwise to increase bass output, and counterclockwise to decrease it.
- ⑤ Treble: Adjust the treble effect. Rotate clockwise to increase treble output, and counterclockwise to decrease it.
- ⑥ Master Volume: Controls the overall volume of all input levels.
- ⑦ Indicator Lights.
- ⑧ Power Switch: Press to turn on the power, and press again to turn it off; PWR: Power Indicator Light.

Rear Panel Diagram



- ⑨ AC Power Input
- ⑩ Cooling Fan
- ⑪ Common Output Terminal
- ⑫ Constant Voltage Output Terminal
- ⑬ Reserved
- ⑭ Microphone Jack
- ⑮ Line Input Jack
- ⑯ Audio Output Jack
- ⑰ Network Cable Port

Speaker Connection



Note:
4-16 Ω /70V/100V terminals cannot be used at the same time.
Impedance refers to the impedance value of the entire speaker system (load).

Warning:After the connection is completed, be sure to install the terminal protective cover properly. The speaker terminals are at high voltage. Do not touch them to avoid electric shock.

Instructions

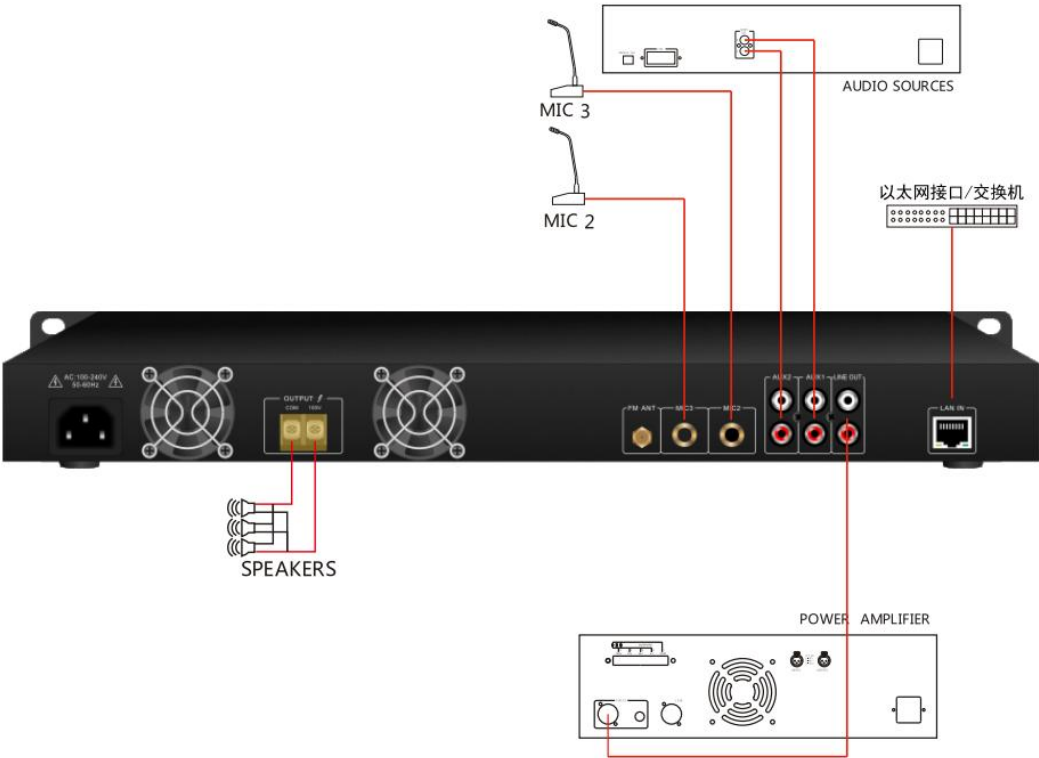
Operation Precautions:
Only use the COM terminal and any one of the other five output terminals. When using 70V and 100V, the speaker must be equipped with an inter-line transformer, and the total power of the speakers should be less than the rated output power of the power amplifier.

Mute Function:
Microphone 1 has the highest - priority output socket. The signal input from this socket will suppress the signals input from other sockets. The degree of suppression can be adjusted by the "MUTE" mute controller on the rear panel of the machine, and the adjustment range is 0 - 30dB.

Simple Troubleshooting

Problem appearances	Reason
The connections are all normal, but there is no sound output.	1. The power is not turned on or the plug has poor contact. 2. The fuse is blown. 3. The volume is not turned up. 4. There is no input signal.
The device starts up normally, but an alarm occurs during use.	1. The load is short - circuited or damaged. 2. The power supply voltage is unstable, either too low or too high. 3. The load is too heavy.
The sound output suddenly stops during normal use.	1. The temperature is too high, and the machine enters the temperature protection mode. 2. The connection has poor contact.

Machine Connection Diagram



Performance and Parameters

Model:								
Rated Power:	80W	130W	180W	260W	360W	500W	660W	800W
Total Power Consumption:	120W	195W	270W	390W	540W	750W	990W	1200 W
Standby Power Consumption:	< 10W							
Network Interface:	Standard RJ45 Input							
Transmission Rate:	100Mbps							
Supported Protocols:	TCP/IP, UDP							
Audio Format:	MP3							
Audio Mode:	16 - bit CD Quality							
Sampling Rate:	8K - 48K							
Input Sensitivity:	MIC1, 2, 3: 5mv/600Ω, Unbalanced TRS Terminal Input;							
Input Impedance:	AUX1, 2: 350mv/10KΩ, Unbalanced RCA Terminal Input							
Output Sensitivity & Output Source Impedance	MIXOUT: 1000mv/470Ω, Unbalanced RCA Terminal Output							
Overload Source	MIC1, 2, 3: >12dB, Unbalanced TRS Terminal Input;							

Electromotive Force:	AUX1, 2: >20dB, Unbalanced RCA Terminal Input
Tone	Bass: ± 10 dB at 100Hz; Treble: ± 10 dB at 10KHz
Frequency Response	80Hz - 16KHz (+1/ - 3dB)
Signal - to - Noise Ratio	MIC1, 2, 3: 66dB; AUX1, 2: 80dB
Total Harmonic Distortion	0.5% at 1KHz, 1/3 Output Power
Channel Crosstalk Attenuation	≤ 50 dB
Output Mode	100V Constant Voltage Output
Heat Dissipation	Forced Air Cooling from Front to Rear, Built - in Fan Starts when Radiator Temperature Reaches 55°C
Protection Circuit	Soft - Start, DC, Short - Circuit, Overheat, Overload, Limiting Multiple Intelligent Detection Protection System
Operating Environment Temperature	5°C - 40°C
Operating Environment Humidity	20% - 80% relative humidity, no condensation
Input Power Supply	~220V/50Hz (Some models: ~90 - 265V/50Hz)
Dimensions	484x210x45mm
Weight	2.7kg (Some models: 3kg, 3.3kg)
Material	Black aluminum panel, SPCC cold-rolled plate chassis

Precautions

- **If any of the following abnormal situations are found during use, please immediately turn off the power, quickly pull out the plug, and contact Equinet.** Do not continue to use this machine until the problem is resolved, as it may cause fire or electric shock.
- If you notice smoke or a strange smell coming from this machine.
- If water or a metal object falls into this machine.
- If this machine drops or the casing is damaged.
- If the wire is damaged (the wire core is exposed, broken, etc.).
- If a malfunction (no sound) is detected.
- Since there are high - voltage components inside the machine, to avoid fire or electric shock, never open the machine casing. If there is a problem, please contact Equinet.
- Never place cups, bowls, vases or other liquid - containing substances on this machine. If liquid accidentally spills into the machine, it may cause fire or electric shock.
- Never expose this machine to rain or any humid or water - prone place, as it may cause electric shock or fire.
- Never put metal objects, flammable materials, or coins into the ventilation holes on the machine cover, as it may cause fire or electric shock.
- Do not place heavy objects on this machine to avoid personal injury or property damage

when the machine slides off.

- Make sure the volume is set to the minimum before turning on the machine. High volume during startup may cause hearing problems.
- Do not continue to use this machine when the sound is distorted, as it indicates a malfunction and may cause high temperatures inside the machine and fire.
- The power supply of the device must be connected to a power outlet with a grounding device to ensure the device is properly grounded for use.
- If the machine needs to be cleaned due to long - term dust accumulation, please contact Equiinet to clean the machine regularly to prevent damage to the machine or fire.
- This product uses the power plug or the appliance inlet socket as the disconnection device from the mains power supply. For safety reasons, it must be disconnected when necessary.
- If the front panel of this machine is upgraded, no prior notice will be given. Please refer to the actual product for specific details.