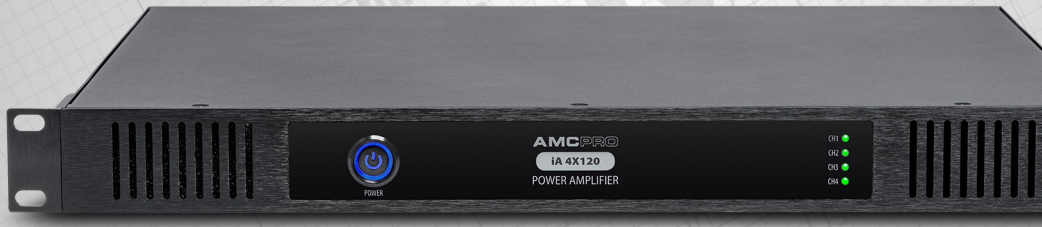
User Manual

iA Installation Amplifier



Safety instructions

When using this electronic device, basic precautions should always be taken, including the following:

1 Read all instructions before using the product.

2 Do not use this product near water (e.g., near a bathtub, washbowl, kitchen sink, in a wet basement or near a swimming pool etc). Care should be taken that objects do not fall into liquids and liquids would not be spilled on the device.

3 Use this device when you are sure that it has a stable base and it is fixed securely.

4 This product, in combination with loudspeakers may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult with otorhinolaryngologist.

5 The product should be located away from heat sources such as radiators, heat vents, or other devices that produce heat.

6 Note for power connections: for pluggable equipment, the socket-outlet shall be installed near the equipment and shall be easily accessible.

7 The power supply should be undamaged and never share an outlet or extension cord with other devices. Never leave device plugged into the outlet when it is not being used for a long period of time.

8 Power disconnection: when the power cord connected to the power grid is connected to the machine, the standby power is turned ON. When the power switch is turned ON, the main power is turned ON.The only operation to disconnect the power supply from the grid, unplug the power cord.

9 Protective Grounding - An apparatus with class I construction shall be connected to a power outlet socket with a protective grounding connection.
Protective Earthing - An apparatus with class I construction shall be connected to a mains socket outlet with a protective earthing connection.

10 The lightning flash with an arrowhead symbol, with an equilateral triangle, is intended to alert the user to the presence of uninsulated dangerous voltage' within the products enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



11 The exclamation mark within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.



12 There are some areas with high voltage inside, to reduce the risk of electric shock do not remove cover of the device or power supply.
The cover should be removed by the qualified personnel only.

13 The product should be serviced by qualified service personnel if:
- The power supply or the plug has been damaged.
- Objects have fallen into or liquid has been spilled on the product.
- The product has been exposed to rain.
- The product has been dropped or the enclosure damaged.

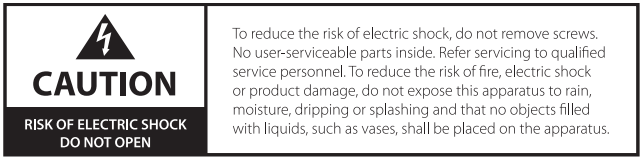


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Before you start

The iA series device is a professional 100 V installation amplifier designed specifically for the contractor market. It offers four outputs, a fan-powered cooling system, and rack-mount capability, making it versatile and easy to install in a variety of settings. Built to withstand demanding environments, the amplifier requires minimal maintenance after installation. Ideal for medium to large public address background music systems. iA series amplifier features a switching power supply with Power Factor Correction (PFC) for improved efficiency and effective four-channel Class D design, ensuring high performance while minimizing energy consumption. It also supports transformerless 100V output and can drive 8-ohm speakers, offering flexibility for various speaker configurations.

FEATURES

- 4 outputs for 100V or Low Z audio lines
- High-pass filter
- Switching power supply
- Fan powered cooling system
- Power ON, Clip, Signal, and Protect LED indicators for each channel.
- Separate auto standby for each amplifier channel.
- PFC circuit

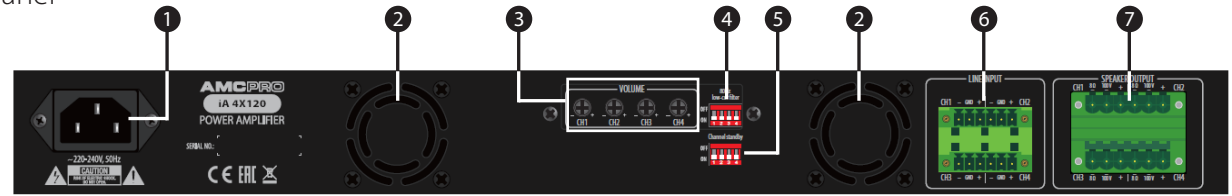
Operation

Front Panel



1. Ventilation air ducts | 2. Power switch with LED indicator | 3. Channel signal, clip and protection indicators

Rear Panel



1. Mains lead socket | 2. Fan | 3. Volume controls | 4. Low cut filter controls | 5. Auto standby control | 6. Input terminals | 7. Output terminals

Operation

Front and rear panels

POWER SWITCH
Before turning on the amplifier, check all connections. A momentary muting is normal when turning the amplifier on or off.
(Caution: Always turn on your power amplifier last, after all other connected equipment, and always turn off your power amplifier before other connected equipment.)

CHANNEL SIGNAL AND PROTECTION INDICATORS
The amplifier has a four multi-color LED indicator designed to indicate the status of each individual channel. LED indicator state of each channel:

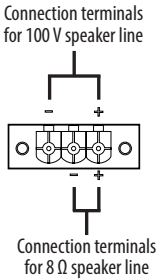
- Green – active audio signal in the channel input.
- Amber – signal clipping
- Red – protection circuit active for the channel.

After powering on amplifier LED indiactors starts illuminate and goes off after few seconds if the amplifier is not damaged.

MAINS POWER CONNECTOR
This connector is designed for connecting main power to the amplifier.

COOLING
iA series amplifiers have two active fans at the back for device cooling and two air ducts at the front. Do not cover the airflow and leave sufficient space around the amplifier for proper ventilation.

OUTPUTS
The amplifier has four outputs that can be used with 8 Ω and 100 V speaker lines. Ensure that the wires are connected to the appropriate terminals according to your audio system configuration. Below is the wiring diagram, and the wiring is also clearly marked on the amplifier's rear panel.
Caution: do not connect 8 Ω and 100 V lines to the same output simultaneously.



Operation

Front and rear panels

LINE INPUTS
The amplifier has four line-level inputs, corresponding to channels 1 to 4. These inputs are designed for balanced signal.

LOW CUT FILTER
Reduce audio frequencies below 80 Hz for each individual channel. This function is highly recommended if 100V audio systems have installed volume controllers or if the audio system consists of speakers with limited low-frequency reproduction.

VOLUME
Use these potentiometers to control the volume for channels 1–4 with a Philips screwdriver. The volume potentiometers are semi-hidden on the rear panel to prevent unauthorized adjustments.

STANDBY SETTING
The amplifier is equipped with an auto-standby function to help save energy. If no audio signal is detected at the input for a period of 2 minutes, the amplifier will automatically enter standby mode. This feature is individual for each amplifier channel and can be enabled or disabled using the DIP switch. The amplifier channel will remain off until it detects an audio signal.

General Specifications

iA 4X120, iA 4X240 installation amplifiers

	iA 4X120	**iA 4X240**	**iA 4X500**
Power supply	AC 230 V / 50 Hz		
Output power @ 8 Ω	4 x 120 W	4 x 240 W	4 x 350 W
Output power @ 100 V	4 x 120 W	4 x 240 W	4 x 500 W
Total harmonic distortions	< 0,1 %		
Input sensitivity	0 dBu		
Output	100 V and 8 Ω Phoenix connector		
Volume control	Min position -∞ Max position 0 dB		
S/N ratio	80 dB		
Frequency response	Low cut off: 20 Hz - 20 kHz Low cut on: 80 Hz - 20 kHz		
Cooling	Fan powered cooling system		
Indicators	PowerON: blue Signal: green Clip: amber Protect: red		
Weight	6.1 kg		7.1 kg
Dimensions	482 mm x 420 mm x 44 mm		

The specifications are correct at the time of printing this manual. For improvement purposes, all specifications for this unit, including design and appearance, are subject to change without prior notice.