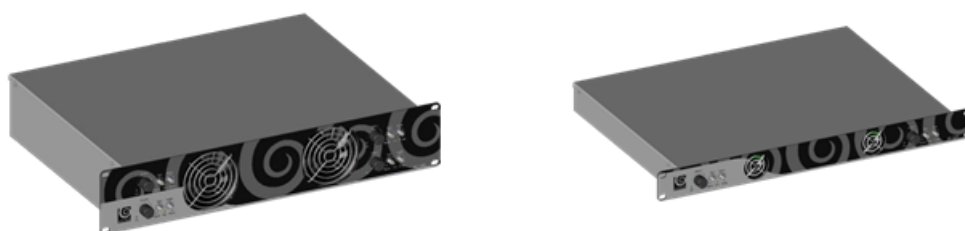




Product Technical Documentation

Multichannel Power Amplifier

AD-1000



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A. Description

The **AD-1000** 100V line power amplifier power range includes amplifier from 150W to 500W in 1, 2 or 4 channels versions.

Switching power supply in combination with class D amplifier stage permits less weight and energy efficient.

Each channel is equipped with individual switching power supply and output class D power stage.

Following main features are available for each channel :

- 0dbm electronic balanced input
- Mute input
- 100V electronic output (switchable to 70V)
- Volume control
- Bass control
- Treble control
- Green led for Power On
- Blue led for Signal
- Yellow led for Clip information
- Red led for Protection indication
- Built-in protection for output short-circuit
- Removable block terminal for easy connection

Whatever the version, forced-air cooling system insures good internal thermal conditions so reliability is improved.

Reference	Settings
AD1-1150	1 x 150W
AD1-1250	1 x 250W
AD1-2150	2 x 150W
AD1-2250	2 x 250W
AD1-1500	1 x 500W

Reference	Settings
AD1-2500	2 x 500W
AD1-4150	4 x 150W
AD1-4250	4 x 250W
AD1-4500	4 x 500W

B. Channel position

From 1 to 2 channels on 1U models. From 1 to 4 channels on 2U models. Adjust potentiometer on front face.

All connexion are achieved on the rear face.

Figure 1. Version 1 channel / 1 U

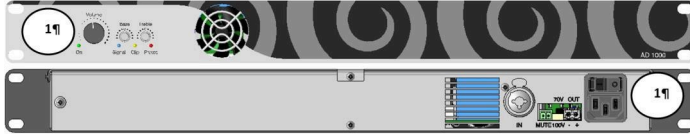


Figure 2. Version 2 channel / 2U

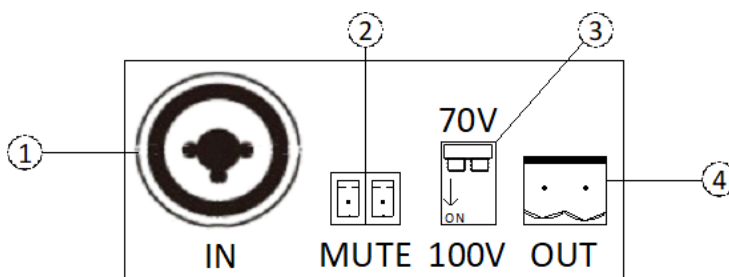


1. Channel 1
2. Channel 2
3. Channel 3
4. Channel 4

Figure 3. Version 4 channel / 2U

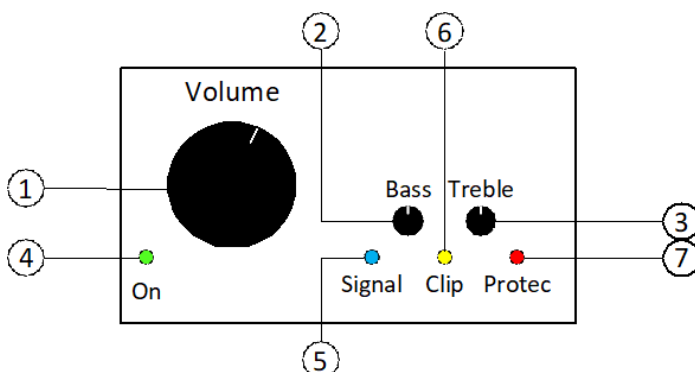


C. Rear view of a channel



1. 0 dBu input XLR / Jack
2. Mute input
3. 100V / 70V selection
4. 100V output

D. Front view of a channel



1. Volume : adjust the input level
2. Bass : adjust the Bass input level
3. Treble : adjust the Treble input level
4. On indication : light green when power is On
5. Signal indication : light blue to indicate that signal is present at the input
6. Clip indication : light yellow to indicate that output signal is clipping
7. Protec indication : light red to indicate that the channel protection circuitry is active

E. Installation and wiring



The unit is neither water nor splash proof.

E.1. 0dBu input connection

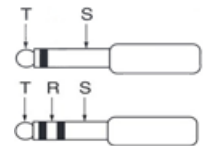
Connection is achieved on the XLR/Jack combo socket placed on the rear face of the channel.

By using 3 pts XLR male connector : 1 = Ground, 2 = Hot, 3 = Cold



By using mono 6,35mm Jack plug : T= Hot, S = Cold (in this case of asymmetrical connection, signal will be attenuated for 6dB)

By using stereo 6,35mm Jack plug : T = Hot, R = Cold, S = Ground



E.2. Output connection loudspeaker

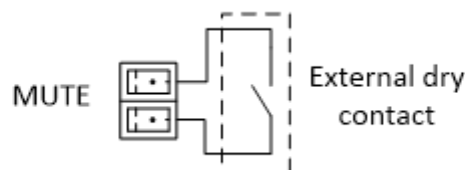
Connect the loudspeaker line to the 4 connector on the rear view.

E.3. 100V / 70V selection

Set the 100V/70V selector on the desired position (1 and 2 position simultaneously).

E.4. Mute input wiring

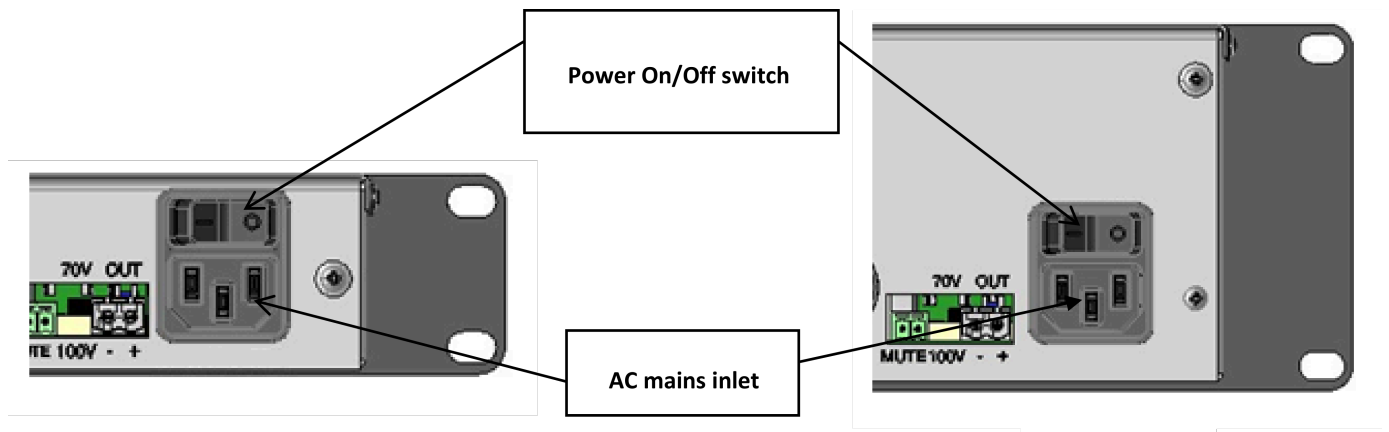
Connect a dry contact to the # connector of the rear view (see below)



F. Operating

F.1. Power on

The AC mains inlet and the power on/off button are placed at the rear of the rack.



F.2. Light indicator

Light indicators in front of each channel give following information :

- The '**On**' green indicator when indicates that the channel has correct power supply.
- The '**Signal**' blue indicator lights at the rythm of the input modulation signal.
- The '**Clip**' yellow indicator is on to indicate that output signal is clipping.
- The '**Protec**' red indicator is on when the channel is in protection state ; no output signal is available.

F.3. Adjustements

Volume adjustment is used to adjust input signal.

Bass adjustment is used to increase or decrease the low frequencies of the input signal.

Treble adjustment is used to increase or decrease the high frequencies of the input signal.

F.4. Functions

Mute : This function can be used to mute the output of the channel ; the information to activate this function must be dry contact ; the Mute is active when the contact at the Mute input is closed.

100V/70V selection : The 100V/70V selector is used to select output signal level either 100V or 70V.

G. Technical specifications

G.1. Common range specifications

Type	Parameter	Value
Input	Input sensitivity	0dBu
	Input type	Electronic balanced
	Connectivity	Combo : XLR + 6,35mm Jack
Output	Voltage	100V/70V (dip switch selection)
	Power	150W/250W/500W
	Bandwidth	20Hz to 20kHz (-3dB @ -10dB ref rated output)
	Distorsion	< 0,5% @ rated output, 1kHz
	S/N ratio	> 80dB
	Connectivity	2 pts removable terminal block (pitch 5,08mm)
Other	Mute input	Dry contact
	Connectivity	2 pts removable terminal block (pitch 3,81mm)
Power supply	Mains	110V-265V AC 50Hz-60Hz
(l x p x h) in mm	1U	483 x 328 x 44
	2U	483 x 328 x 88
Fixing distance in mm	1U	465
	2U	465

G.2. Specific range specification

Specifications	AD1-1150	AD1-1250	AD1-2150	AD1-2250	AD1-1500
Channel x Power	1 x 150W	1 x 250W	2 x 150W	2 x 250W	1 x 500W
Nominal Power consumption	180W	280W	360W	565W	560W
1/8 Pmax Pink noise Consumption	31W	44W	58W	100W	93W
Weight	3,6 kg	3,6 kg	4 kg	4 kg	4 kg
U-dimension	1 U	1 U	1 U	1 U	2U

Specifications	AD1-2500	AD1-4150	AD1-4250	AD1-4500
Channel x Power	2 x 500W	4 x 150W	4 x 250W	4 x 500W
Nominal Power consumption	1120W	720W	1130W	2240W
1/8 Pmax Pink noise Consumption	185W	120W	190W	370W
Weight	6,5 kg	6,5 kg	6,5Kg	6,5Kg
U-dimension	2U	2U	2U	2U

H. Preventives measures



Please make sure to read carefully all following instructions

1. Take a look at all the warnings. Don't remove the security tags on the device or other information.
2. Use the device only for indicated applications, and in an appropriate way.
3. The use of this device is not recommended above 2000 meters above sea level.
4. Don't obstruct aeration openings with some objects.
5. Respect a minimal distance around the device to ensure enough aeration.
6. Don't expose the device to rain or moisture (except if the device is conceived for outdoor use – in this case, you must respect the instructions which come with it).
7. If your device doesn't work anymore, and if water or other objects enter inside, turn it off directly and unplug it. This device must be repaired by a qualified person.

Devices plugged on mains power

8. Turn off the device before touching any conductive parts inside it.
9. Don't switch the device on-off several times in a row : you risk to reduce the longevity of its intern components.
10. Replace the fuse only by a fuse with the same type and the same caliber.
11. Warning, a power plug has three spindles, including a protection ground spindle. The third spindle ensures safety. Check if the protection ground spindle provided enters in the electrical outlet, otherwise, consult an electrician to replace the obsolete outlet.

Warnings symbols



Protection ground spindle



Ground spindle



Direct current or continuous voltage



Alternating current or Alternating voltage



Dangerous voltage by touch, risk of electrification, even electrocution



Read carefully the joined document



Warning, hot surfaces, don't touch during operation, risk of burns



Devices which are excessive thermal energy sources

Warning, hot surfaces, don't touch during operation, risk of burns.



Audio devices such as loudspeakers

High sound pressure, risk of hearing damage, do not listen at high volume levels for extended periods (greater than 90 dB).



Product's disposal

At the end of the product's life, if it is installed on French territory (including DOM-TOM), please contact ECOSYSTEM. BOUYER is a member of this eco-organisation for the recycling of its products in accordance with the WEEE directive.

Otherwise, please apply the regulations of the country where the product is installed.