

LCOMP2

manual

ATTENTION !

reference manual

Potentially dangerous situations can arise which can cause injury.

Potentially dangerous situations can arise which can cause damage to equipment.

Potentially dangerous situations can arise that can lead to malfunctioning equipment.

symbology



ATTENTION !
equipment under electricity

general information

LCOMP2 manual

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The information in this guide were checked exactly but no guarantee is given regarding the correctness.

Lombardi Amplificazioni assumes no responsibility for any errors or inaccuracies contained in this manual or products described therein.

As producers, we reserve the right to make changes in the framework of laws designed to improve quality.

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Precautions during use

Before using a product of Lombardi Amplifications ensure that you read well the manual in order to observe the safety precautions that will help you make proper use of equipment to prevent and avoid damages. Keep this manual for future reference.

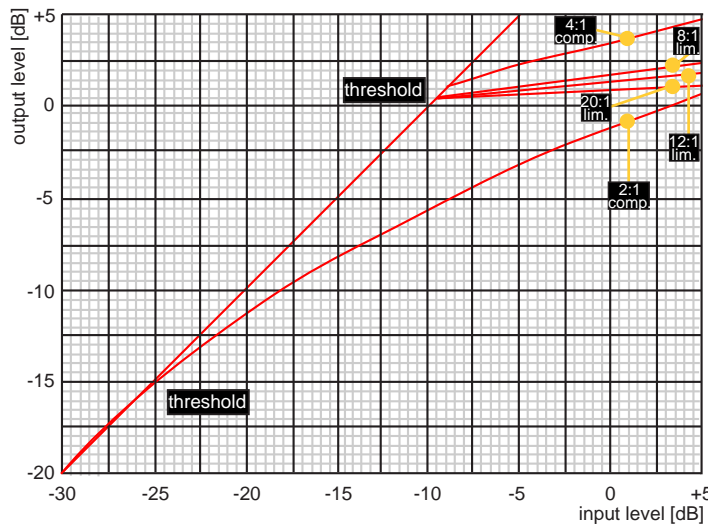
ATTENTION !

information on use of the compressor

To prevent electric shock do not remove the lid.
Contact qualified personnel only.
Unplug the power cord before open this product.
To reduce the risk of electric shock do not use this product near water.
Do not install near heat sources.
Protect the power cord from being walked on or pinched.
Unplug this apparatus during lightning storms or when is not used for long periods of time.



LCOMP2 is a compressor that combines to the exceptional fidelity and transparency of the circuitry with resistive optocoupler, the modern technology, the careful choice of the selected and low noise components, the quality control with handmade assembly, the fully analog processing signal, the balanced stage output with transformer... all these features give to the LCOMP2 a superlative quality. Also has

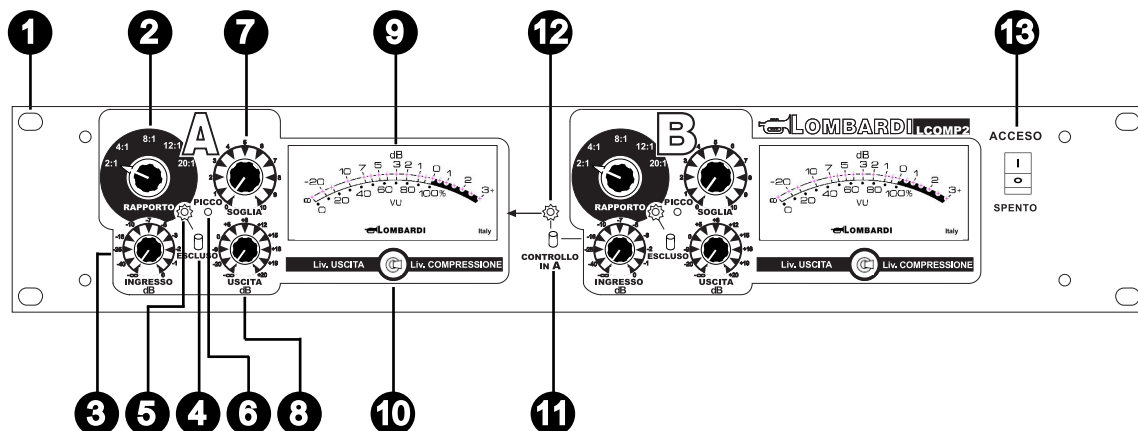


an original look between vintage and modern style, there is the control of input and output volume, threshold and ratio compression. Led's VU meter is backlit, immediate and easy to read with a switch for choose between compression / output level signal [dB]. Button for a stereo control on a single channel (A). Versatility of application from a soft compressor to a limiter. It's a perfect machine for any type of application: live, recording studio and mastering.

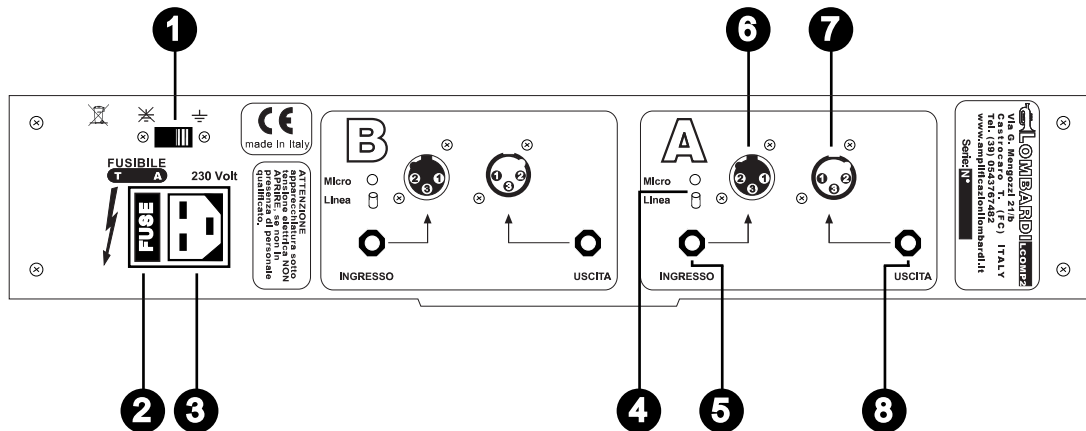


technical specifications

input	in A: XLR (Cannon) female parallel with 6.3 mm jack		
	- Balanced		
	in B: XLR (Cannon) female parallel with 6.3 mm jack		
	- Balanced		
input impedance	47 Kohm - balanced input		
	25 Kohm - unbalanced input		
output	out A: XLR (Cannon) male parallel with 6.3 mm jack -		
	balanced of transformer output		
	out B: XLR (Cannon) male parallel with 6.3 mm jack -		
	balanced of transformer output		
Output load	150 ohm or higher		
Max level input / output	+ 20 dB		
equivalent input noise	< -90dB (15.7 KHz of bandwidth)		
maximum input level	depends on the selection of mic / line in the back		
	will have different levels:		
	- maximum range HIGH +20dB*		
	- maximum range LOW 0 dB*		
	(* 0dB = 0,775 V RMS)		
gain	depends on the selection of mic / line in the back		
	will have different levels:		
	- maximum range HIGH 40dB		
	- maximum range LOW 20 dB		
THD (harmonic distortion)	<0,001% without the threshold		
frequency response	20 Hz - 20 KHz		
attack time	1 to 10 ms Depending on the signal		
release time	100 to 1 ms by the time the period of limitation		
compression ratio	2:1, 4:1, 8:1, 12:1, 20:1 selectable via front panel		
	switches		
compression threshold	Adjustable front panel		
	ratio	low range	high range
	2:1	-61dB*	-41dB*
	4-8-12-20:1	-45 dB*	-25dB*
	(* 0dB = 0,775 V RMS)		
power supply	internal switch for 115V / 220-240V		
power transformer	toroidal		
dimensions	2 RACK unit		
weight	7,2 Kg		



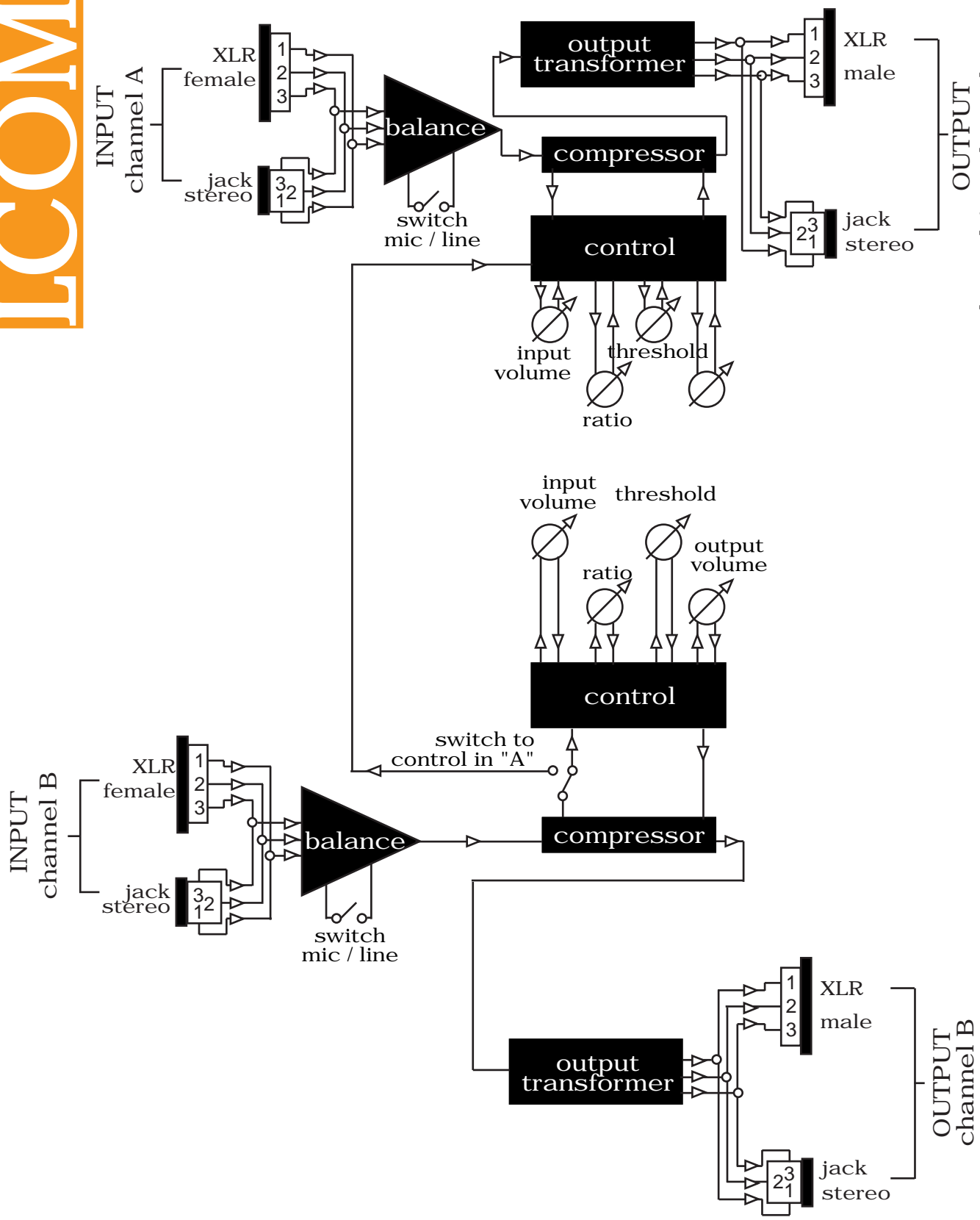
- 1** **mounting RACK**
There are 4 holes in front panel for rack mounting. The space within a rack is 2 units.
- 2** **RATIO (rapporto)**
Potentiometer to adjust in increments of compression ratio, the numerical scale of reference shows the different compression ratios possible.
- 3** **INPUT (ingresso)**
Potentiometer to adjust the input volume, the numerical scale of reference is figured in dB.
- 4** **switch BYPASS (escluso)**
This switch once and hold (with LED "excluded" on) indicates that the channel is excluded (bypass), then the input signal is unchanged.
- 5** **LED BYPASS (escluso)**
The green LED (switched "bypass" down) indicates the channel is excluded (bypass), then the input signal is unchanged.
- 6** **LED PEAK (picco)**
The red LED indicates when the input signal is too high
- 7** **THRESHOLD (soglia)**
Potentiometer for adjusting the compression threshold, the numerical reference scale ranges from 1 to 10. (increasing this pot the treshold is going down)
- 8** **OUTPUT (uscita)**
Potentiometer to adjust the output volume, the numerical scale of reference is figured in dB.
- 9** **LED VU-meters**
VU-meters or LED indicating the output level or the level of compression.
- 10** **switch output level / level compression (liv. uscita / liv. compressione)**
This switch lets you decide if the LED VU-meters show the output level or the level of compression.
- 11** **control in channel "A" (controllo in A)**
This switch pressed (with LED "control A" on) indicates that the channel A and channel B are governed by only channel A.
- 12** **LED control in channel "A" (controllo in A)**
This red LED when turned on (switch "control A" down) indicates that the channel A and channel B are governed by only channel A.
- 13** **switch on/off (accensione / spegnimento)**
Power switch ON and OFF.



- 1** switch
switch for switching the ground insertable.
- 2** FUSE (fusibile)
fuse to protect equipment.
fuse:
220/240V: T 0,315 A
115V: T 0,630 A
- 3** Input power
VDE Power
- 4** switch and LED line / mic (linea / micro)
Switch OFF - Micro LED red OFF:
- Line in
- High signal level
- Salt used in Insert, insert monitor, powered speakers, mixer, etc. ...
- 5** input jack 6,3mm
balanced input jack 6,3mm
1 ground - 2 signal - 3 phase
- 6** input XLR (cannon)
balanced input XLR femmina
1 ground - 2 signal - 3 phase
- 7** output XLR (cannon)
balanced output XLR maschio
1 ground - 2 signal - 3 phase
balanced of transformer output
- 8** uscita jack 6,3mm
balanced output jack 6,3mm
1 ground - 2 signal - 3 phase
balanced of transformer output

Switch ON - Micro LED red ON:

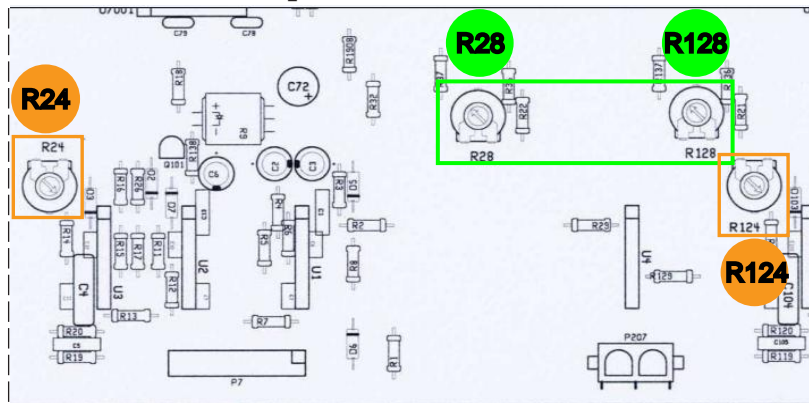
- Mic input
- Low signal level
- Low impedance
- Amplification > 20 dB
- Used in Insert a mic channel, direct microphone, etc. ...



channel A or channels together

calibration

Input Circuit



instrument calibration

The device has a level indicator LED meter.

In the rest position (no signal) with the switch set to "Liv. Compressione", the Led bar is lit up at 0 db (yellow LED).

If this doesn't occur, it is possible to calibrate the instrument using two trimmers located inside the unit into the main board (**R28** for channel A, **R128** for channel B).

Adjust the trimmer until you get **0db** (yellow led lit up).

Monitoring the level of compression and limiting

CHANNEL A

- Switch the instrument on " **liv. Uscita** " (output level)
- Set the radio switch " **Rapporto** " on **8:1**
- Set the Threshold " **Soglia** " to **0**
- Set the " **Ingresso** " (input) level to the **maximum** value
- The " **Controllo in A** " switch(Control in A) has to be **disconnected**
- Verify that the mic/line button on the rear panel, is positioned to " **linea** " (line)
- With a sine wave generator give a signal (**sine wave, 2KHz freq , 250mV intensity**) into the input circuit of the channel
- Adjust the " **uscita** " level (output) on the yellow LED (**0dB**)
- Using the " **soglia** " control (threshold) to bring the signal down to **-1dB**
- Adjust the " **uscita** " control (output) and bring the signal to **0 dB**
- Increase the signal generator up to **2,5 V** (equal to +20dB)
- check that the LED meter light up to **+1,5 dB**
- If necessary adjust the trimmer located inside into the main board signed **R24 (channel A)** until the meter indicate **+1,5db**
- Then move the " **rapporto** " switch (ratio) on **12:1** and **20:1** and verify that the signal value is displayed amounted to **+1 dB (with 12:1)** and **0 dB (with 20:1)**; work on the same trimmer to reach this level

CHANNEL B

Same mode of channel A through the trimmer initialed **R 124**

inputs and connections

In the rear panel of the compressor are located input and output connection for each channel.

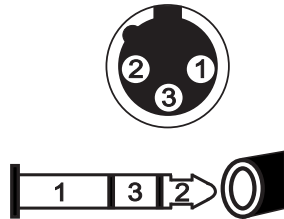
input channel A:

XLR (Cannon) male

jack 6.3 mm female

both connector are balanced and parallel connected

1 ground - 2 signal - 3 phase



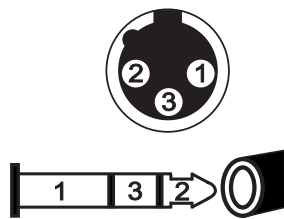
input channel B:

XLR (Cannon) male

jack 6.3 mm female

both connector are balanced and parallel connected

1 ground - 2 signal - 3 phase



Output Channel A:

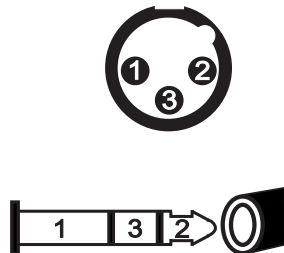
XLR (Cannon) female

jack 6.3 mm female

both connector are balanced and parallel connected

with an output transformer

1 ground - 2 signal - 3 phase



Output Channel B:

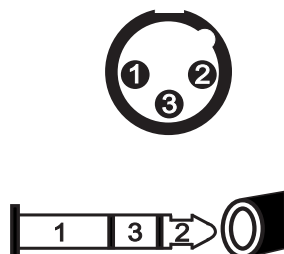
XLR (Cannon) female

jack 6.3 mm female

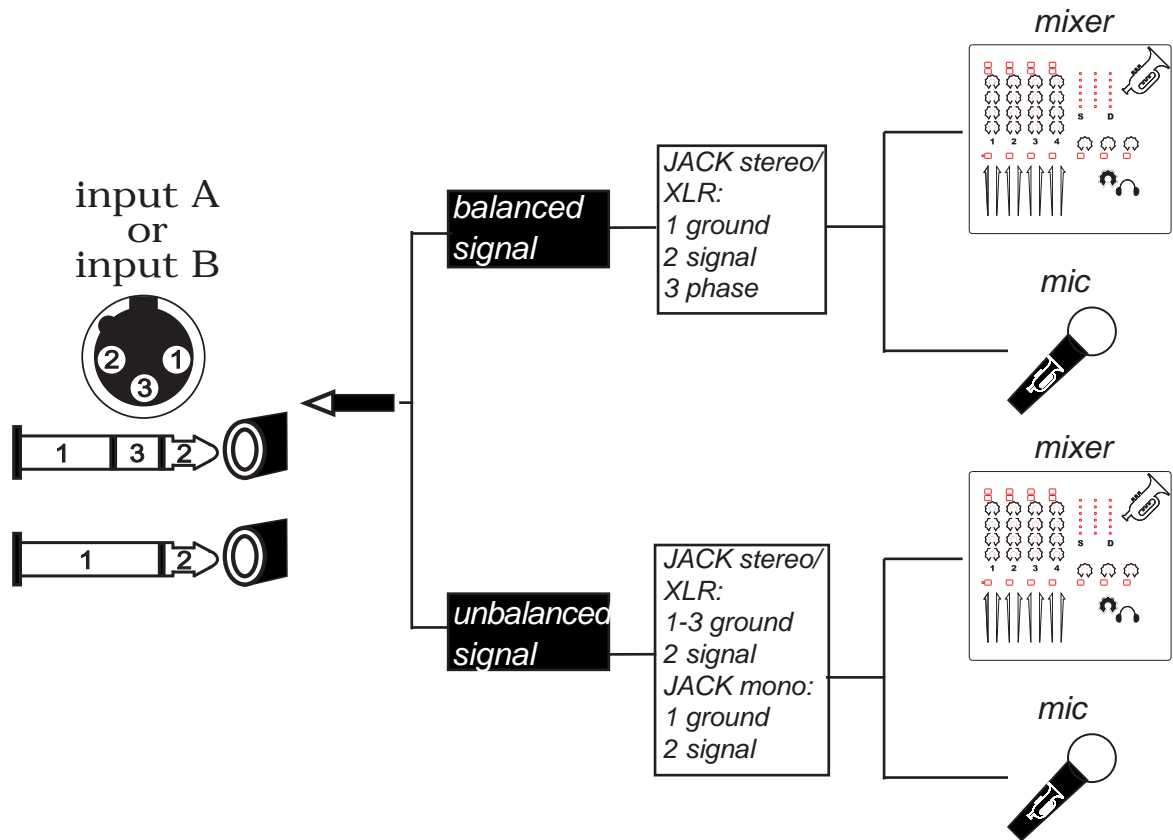
both connector are balanced and parallel connected

with an output transformer

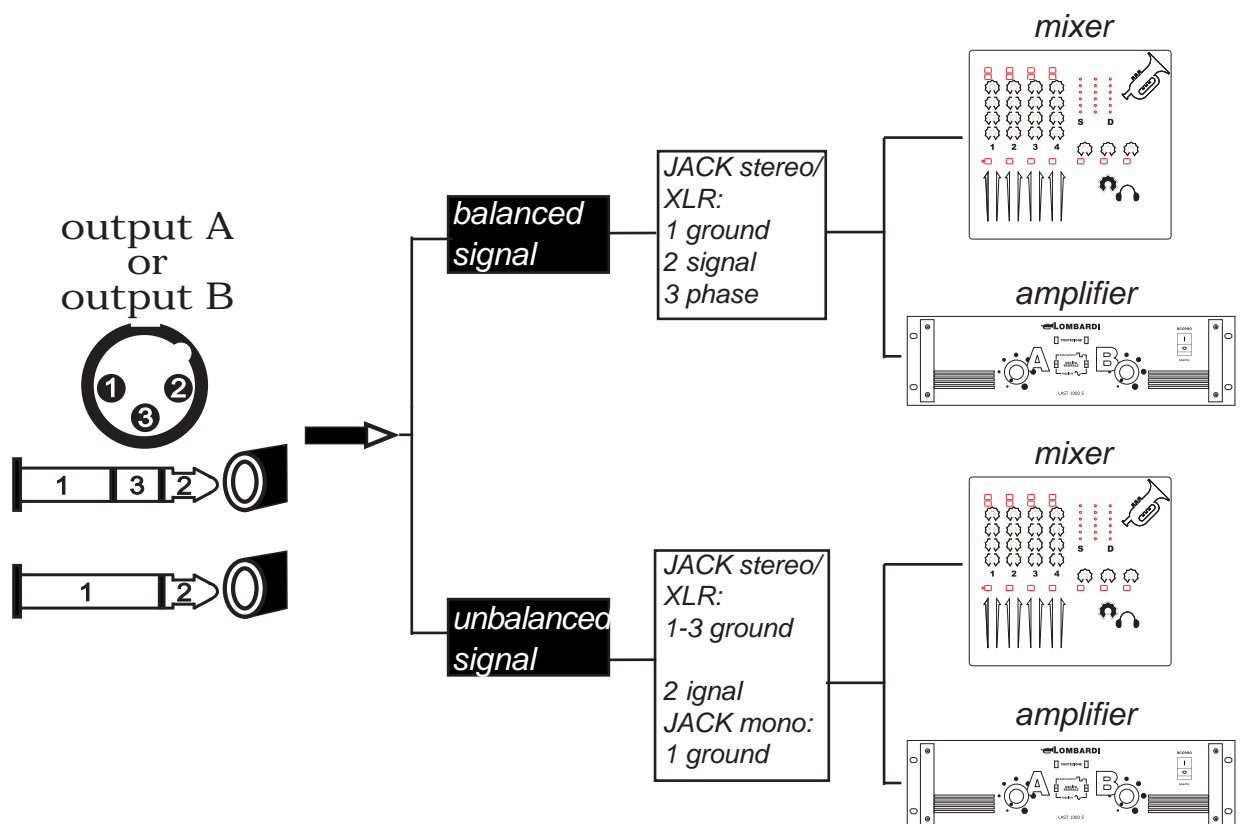
1 ground - 2 signal - 3 phase



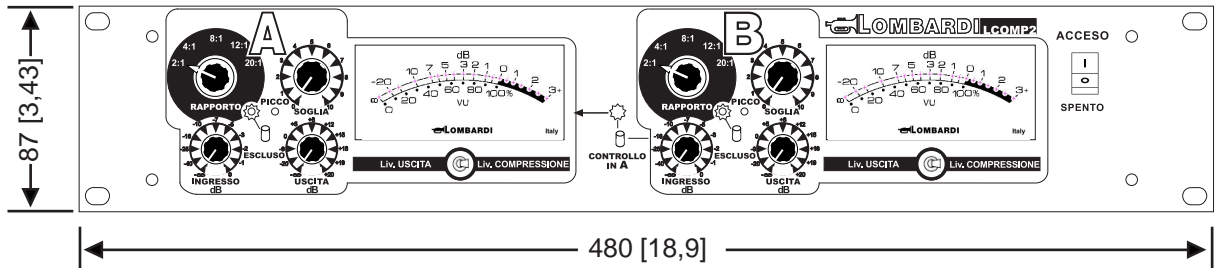
inputs connection use



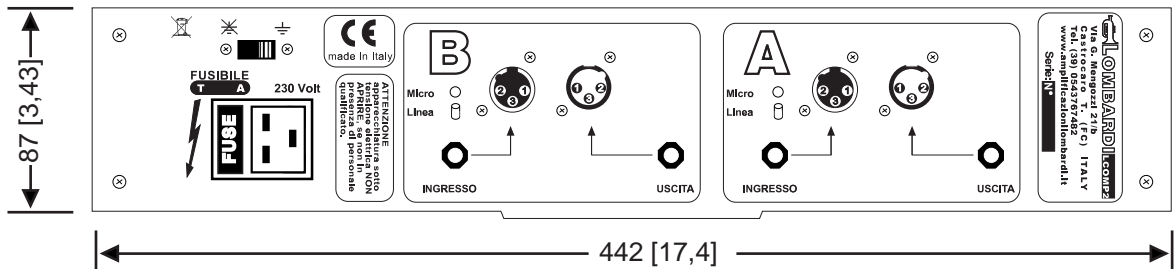
outputs connection use



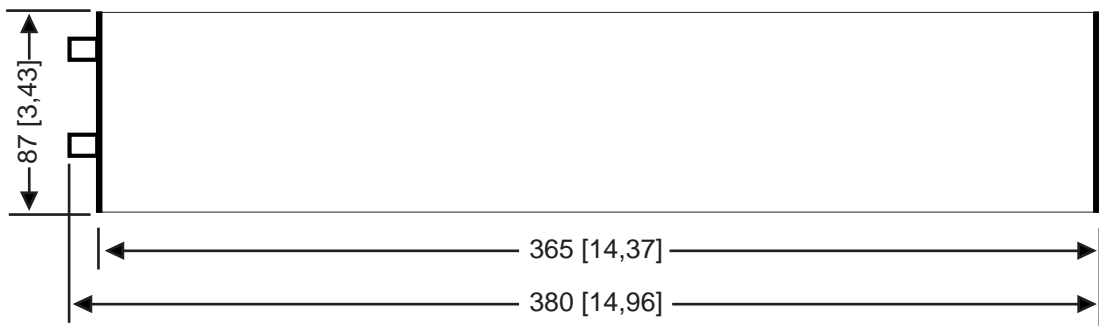
front



rear



side



compliance with European Community



This device complies with European directives regarding electromagnetic compatibility (EMC) 89/336/EEC as amended by Directives 92/31/EC and 93/68/EC and the low voltage directive (LVD) 73/23/EC as amended Directives 93/68/EC.



This device complies with European Directive 2002/95/EC and subsequent amendments concerning the restriction of certain hazardous substances in the production of electrical and electronic equipment.



Under the WEEE Directive 2002/96/EC and its amendment 2003/108/EC this equipment is marked with the symbol of the crossed out wheeled bin. "INFORMATION TO USERS: Under Article 13 of Legislative Decree no.151 July 25, 2005- Implementation of Directives 2002/95/EC and 2002/96/EC, relating to the use of hazardous substances in electrical and electronic, as well as waste disposal.

The waste bin symbol indicates that the product at the end of its useful life, must be separated from other waste. You must bring the equipment to come to suitable separate collection of waste electrical and electronic equipment, or return the retailer when purchasing new equivalent appliance, the ratio of one to one. Proper waste collection to start following the treatment and environmentally compatible disposal contributes in preventing possible adverse environmental effects and health and promotes the reuse and recycling materials that make up the equipment.

Illegal disposal of the product by the user includes the application of administrative sanctions provided for in Legislative Decree no. 22/1997.