

# CLIOQC

AMPLIFIER & SWITCH BOX

MODEL 1



## USER'S MANUAL

Version 1.0  
May 1997



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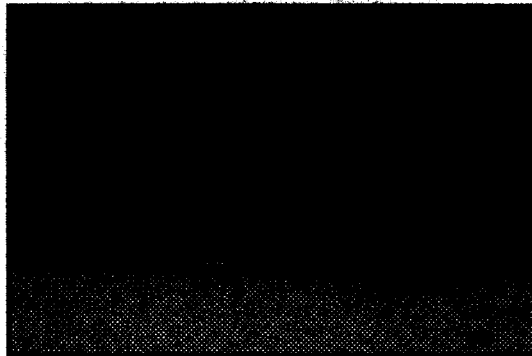
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## THE CLIOQC AMPLIFIER/SWITCH BOX

The CLIOQC amplifier/switch box is of invaluable help when configuring an automatic or manual quality control setup.



Its main internal functions and technical specifications are:

Switching between frequency response and impedance connections.

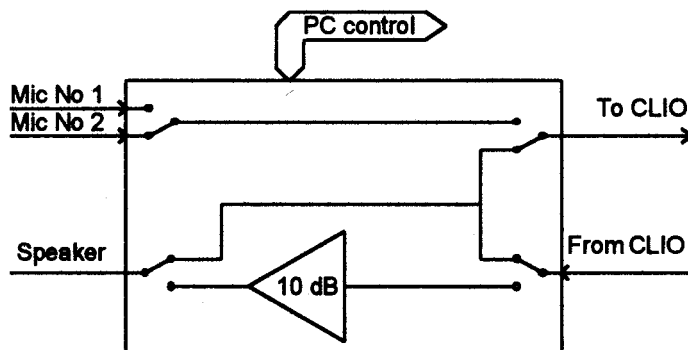
10 Watts power amplifier.

Two phantom powered (and switchable) microphone inputs.

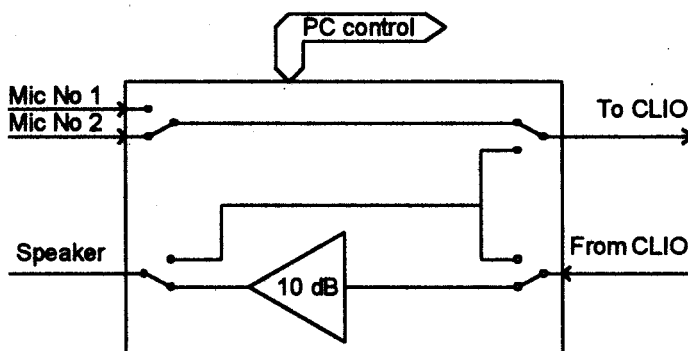
All switches controllable with TTL signals (parallel port connector).

AC mains powered; compact (23x23x8 cm) size; weight 2.7 kg.

Follows its internal block diagram.



*Internal connections for impedance measurements*

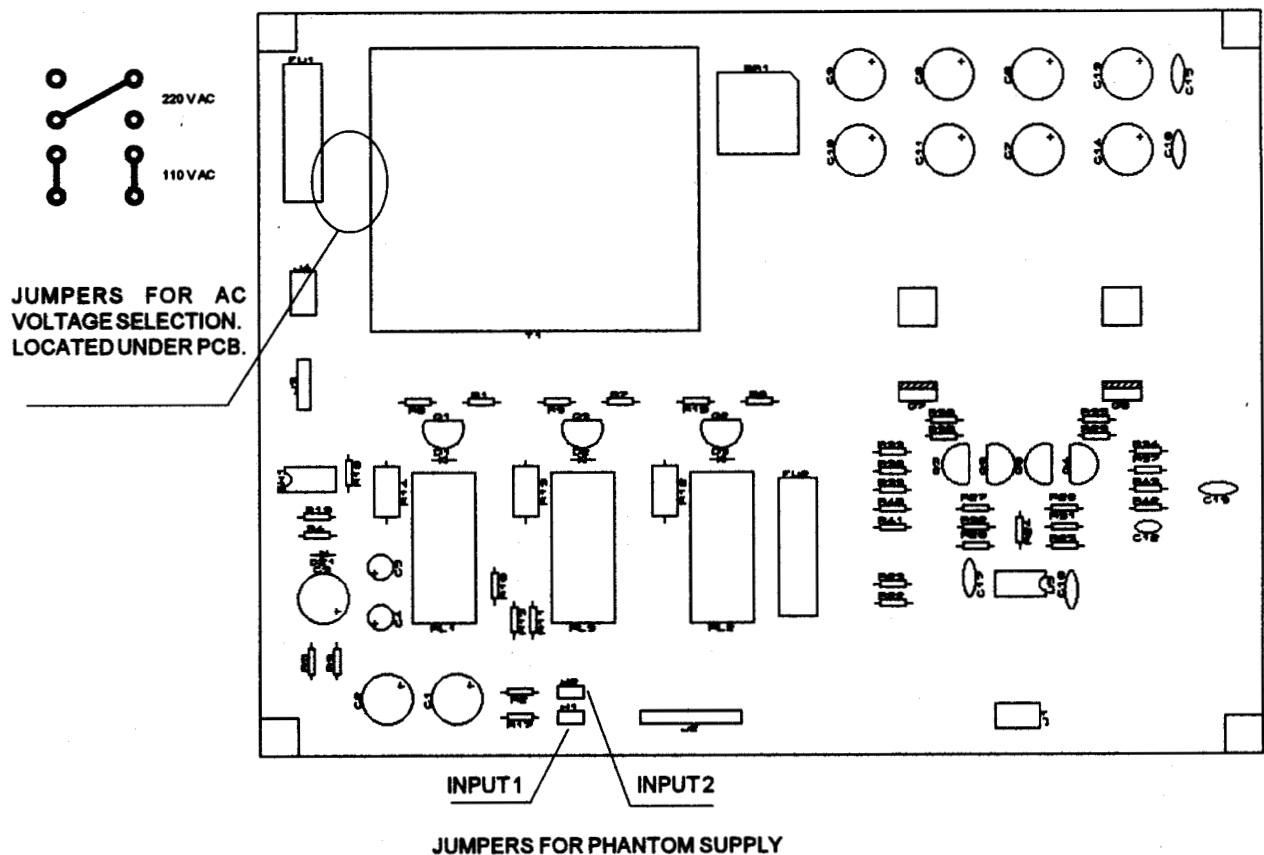


*Internal connections for frequency response measurements*

## AC VOLTAGE SELECTION

In order to operate your amplifier first check that it is configured for proper AC line voltage. If you need to change the setting you have to do the following:

- A) Disconnect the AC power cord.
- B) Open the unit unscrewing the four screws on the top panel.
- C) Disconnect the four connectors located on the main board.
- D) Unscrew the four screws of the main board and remove it from inside of the unit.
- E) Turn the board upside-down and locate the two jumpers for AC voltage selection.
- F) Make the proper selection following the schematic diagram reported.
- G) Follow the preceeding steps backward until closing the unit.

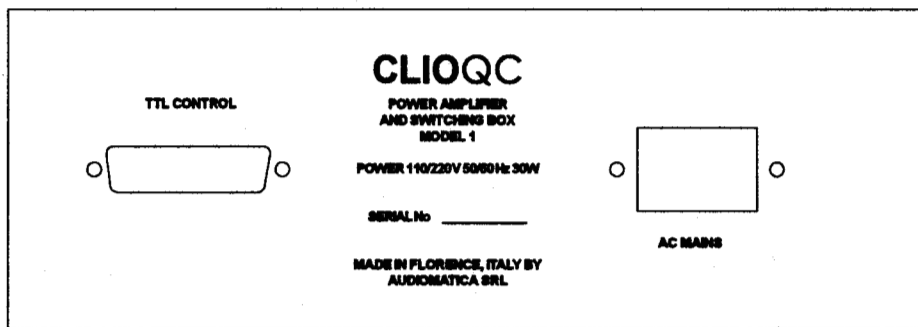
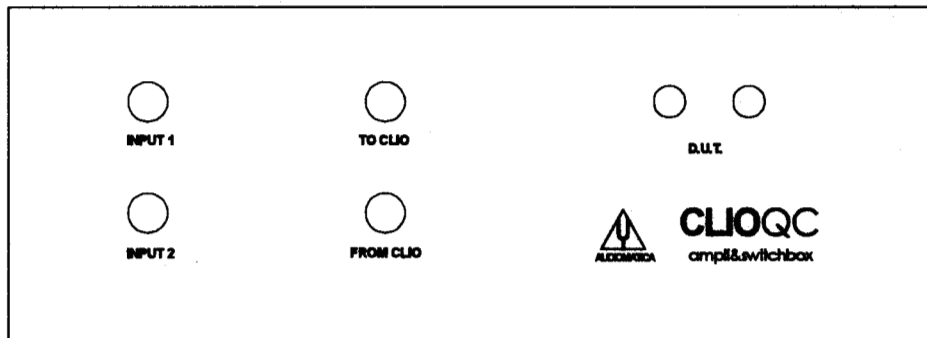


## PHANTOM POWER SUPPLY SELECTION

The above figure shows the location of the two jumpers that connects a phantom power supply of 8.2V (with 5.6 KOhm series impedance) to the relative input in order to operate a microphone connected to it.

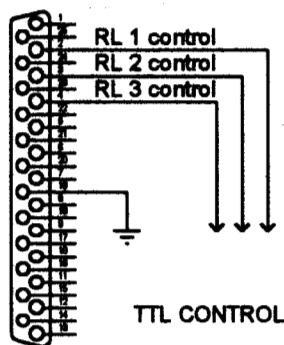
## EXTERNAL CONNECTIONS AND CONTROLS

In the next figures you can see the front and rear panels; several connection has to be made when using



the unit. To turn power on simply plug the AC cord in the wall outlet: there is no mains switch.

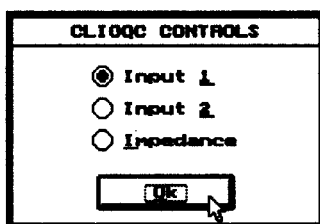
The TTL Control connector can be used for a direct link to a PC printer port with a standard 25 poles male-female cable. The following diagram shows the D-25 connector pinout.



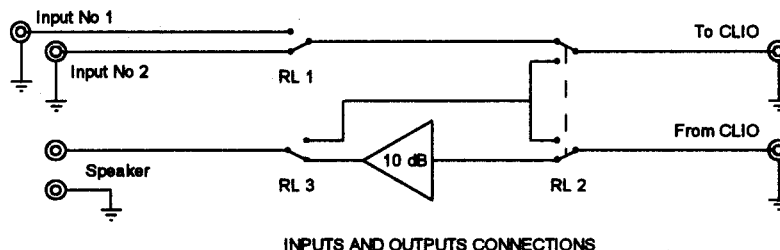
The control definitions of each single bit are as follows:

BIT	LPT BIT	STATUS	FUNCTION
RL1 CONTROL BIT 0	0	0	INPUT 1 SELECTED
RL1 CONTROL BIT 0	1	1	INPUT 2 SELECTED
RL2 CONTROL BIT 1	0	0	RESPONSE MEASUREMENT
RL2 CONTROL BIT 1	1	1	IMPEDANCE MEASUREMENT
RL3 CONTROL BIT 2	0	0	RESPONSE MEASUREMENT
RL3 CONTROL BIT 2	1	1	IMPEDANCE MEASUREMENT

If you connect the unit to a standard PC printer port be sure to control bits 0, 1 and 2; if you are using the CLIO software release 4 use the dialog box recallable with the SHIFT-F4 hot key.



Always keep the internal connection diagram as a reference.



## EXAMPLES

The following diagram shows a possible utilization of the CLIOQC amplifier and switch box in an automatic testing environment of a loudspeaker.

