



# **N R G**

## **4000**

### **GB USER'S MANUAL**

**COMPACT BI-AMPLIFIED SPEAKER**

**300 W RMS MOSFET POWER AMPLIFIER FOR LOW FREQUENCY**

**100 W RMS MOSFET POWER AMPLIFIER FOR HIGH FREQUENCY**

**AUDIO PROCESSOR**

**ELECTRONIC LIMITER**

**CODEM MUSIC**, after the great success had with MAC series, come to you with a new range of speakers.

The target was:

- Realize more versatile speakers
- Add highest quality components, give all above inside an extremely elegant design.

The result is **ENERGY Series**:

**BI-AMPLIFIED**, double amplifier **MOSFET**, **SIGNAL AUDIO PROCESSOR**, electronic **LIMITER**, double active **CROSSOVER**, **MIC-LINE** input.

The boxes, built in poplar plywood covered with moquette, guarantee the best sound expression, lightly and non-deformability, just coming from the strong internal frame.

Thanks to a careful and scrupulous design added to the experience, the **ENERGY** speakers are guarantee of great reliability and top sound expression, the dynamics of each transducer are exalted, protecting it in the same time, from signal peaks or from distortions that might compromised the good working.

Planned and built in accordance with the international safety and electromagnetic compatibility regulations, the speakers had an extremely functional design as a trapezoidal asymmetrical shape; so that can be used as stage monitor. It has ergonomic handles to be carried and a protective metallic grill with a thickness of 1.5 mm that is easily to disassemble. There is the possibility to move horn (square shaped) for a right leak of them in any employment.

#### **USE OF BALANCED INPUTS AND OUTPUTS**

**NRG 400** inputs and outputs are **BALANCED** type, 3 poles XLR.

Balanced connection is studied to have a better rejection against the noise that wires (if very long) takes from external interferences.

Most of professional audio equipment have balanced outputs, you can use however non balanced connection with **MONO** cable (with XLR pin 3 connected to pin 1) the **NRG 400** will work normally, but it will be more sensitive to external interferences.

The 3 poles XLR inputs and outputs are connected together (parallel / link).

You can use each one like an input or an output signal for other speaker systems.

#### **USE OF INPUTS LEVEL AND KEY MIC/LINE:**

Volume knob adjust the input level

The key input sens allows of connect a microphone in the "**MIC**" position. In the position "**LINE**", the **NRG 400** will work normally with inputs at OdB.

Electronic internal limiter will always control input level to have a safe operation of the trasducers.

#### **USE OF KEY GND-LIFT:**

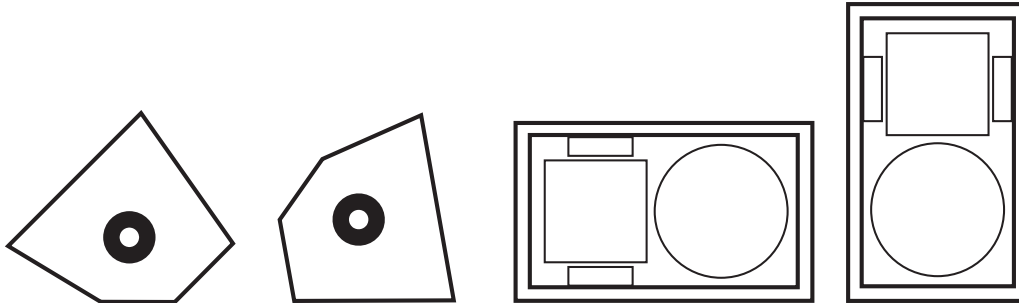
Switch for the electrical separation between the ground circuit and the earth circuit; in the "■" position, the input signal ground is electrically disconnected from the earth circuit, in the event the speaker develops a buzz, this position provides for opening the "ground rings," that are often the cause of such interference. In the "■" position, the input signal ground is electrically connected to the device's earth circuit.

**USE THE GROUND LIFT FOR BALANCED SIGNALS ONLY.**

## USEFUL TIPS

Thanks to its characteristics you can use **NRG 400** for monitoring and sound diffusion or like sound system for piano-bar and live music.

**NRG 400** has been build for vertical, horizontal and installation like a monitor.



On the bottom of the cabinet there is the adapter for speaker stand.

## DESCRIPTION OF REAR PANEL

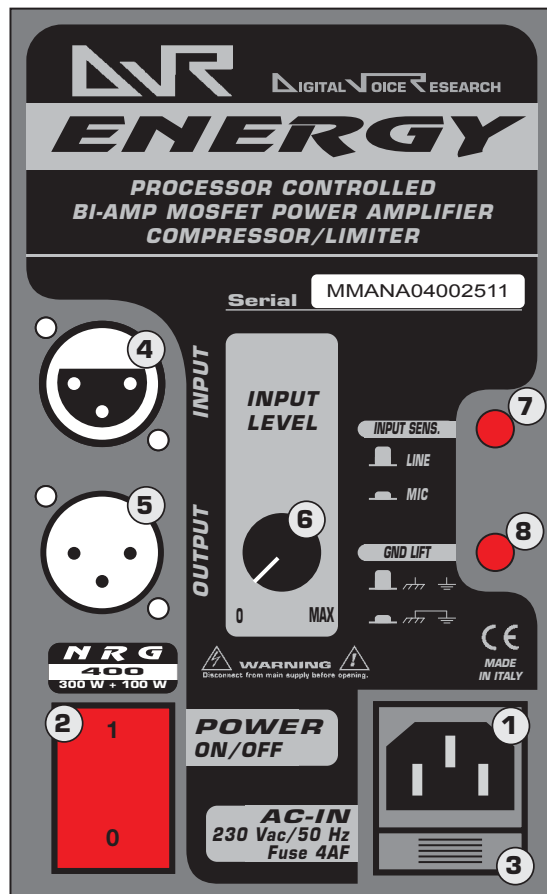
- 1) Power supply 230 Vac 50 Hz
- 2) Power switch with lamp (0-1)
- 3) Protection fuse
- 4) Balanced line input - 3 poles XLR
- 5) Balanced line output - 3 poles XLR
- 6) Input level adjustment
- 7) key input sens.
- 8) key gnd-lift

### NOTE:

The two inputs are parallel connected together, you can use one for input and the other like an output for other speaker systems.

In case of internal amplifier over-heating, the heat-protection turn off the NRG400, when the temperature return to normal level, automatically the protection turn on again the system.

**Input level higher than +10 dB can damage the speaker system.**



### **TECHNICAL SPECIFICATION**

Type	2 Way
Built-in amplifier	300+100 Wrms
Frequency response	38-20 KHz
Sensitivity (1w/1m)	108 dB
Crossover frequency	2,5KHz/Low - 1,2KHz/High
Low frequency woofer	1 x 15"
High frequency driver	1,4"+HORN
Dispersion	80° x 60°
Input connectors	1 x XLRM Neutrik
Output connectors	1 x XLRM Neutrik
Dimension (H x W x D)	455 x 770 x 435 mm
Net weight	31 Kg

### **TECHNICAL SPECIFICATION LOW FREQUENCY AMPLIFIER**

Type	AB class mosfet with audio signal processor
Output power	300 W R.M.S. / 4 Ohm
THD	0,1 % at 1 KHz
Frequency response	20 - 50.000 Hz
Input sensitivity	0 dB
Input impedance	10 KOhm
Electronic Crossover	Slope 12db/oct
Cut of frequency	2,5KHz

### **TECHNICAL SPECIFICATION HIGH FREQUENCY AMPLIFIER**

Type	AB class mosfet with audio signal processor
Output power	100 W R.M.S. / 4 Ohm
THD	0,1 % at 1 KHz
Frequency response	20 - 50.000 Hz
Input sensitivity	0 dB
Input impedance	10 KOhm
Electronic Crossover	Slope 12db/oct
Cut of frequency	1,2KHz

### **PROTECTION**

Electronic limiter on the input signal (max +10 db)  
Protection fuse on power supply (1 x 4AF)  
Double protection fuse on power amplifier (2 x 8AF)  
Self-resetting thermal fuse on transformer and power amplifier



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