

## Greetings from NEM!

Since 1999, NEM has been developing superb audio electronics in Novosibirsk, Russia. NEM combines original technologies and structural units of highest quality, making the circuit boards by means of costly hand assembly. Very few units, selected by NEM, are passed over to the chosen factories, to be assembled following the instructions of NEM. NEM audio components are an example of perfect harmony between sound and hardware, resulting in high fidelity of a full range of music.

## Products

### Hybrid amplifier NEM AI-50

NEM AI-50 is a perfect hybrid structure:

This amplifier seamlessly combines a unique sound, delivered by best tube amplifiers, with all advantages of transistors.

NEM brand philosophy:

The music signal must be amplified without being distorted and pass the amplifier without noise. That is why AI-50 has minimum parts, and they have been thoroughly selected. Moreover, short sections of signal transmission and absence of any negative feedbacks help avoiding the timing errors. NEM AI-50 electric circuit is built on the principle of minimization and allows for the optimal use of sound potential, provided by few custom-made units. Only the following elements are at the short section of each signal transmission per every channel:

TKD or ALPS potentiometer

Tube in the driver section (6N30PI double triode)

NEM interstage transformer, of M4 stainless steel

Output transistors

In NEM AI-50, the tube in the driver section is only purposed for amplifying the music signal voltage, whereas the four output transistors in every channel have the sole function of current amplification. The interstage transformer is precisely adjusted for interplay between the driver section tube and the transistor output stage. This intermediate transformer is only produced by NEM. It has a 99.5% performance, providing for linear frequency characteristic in the range of 4 to 80 000 Hz (-3dB) even under full load. Costly power adapters, the pride of NEM, are special technical extras of the equipment. A dedicated electric circuit, based on rectifiers, impedance coils, and condensers, produces smoothed current without upper harmonics (higher harmonic components) which in turn produces the clearest sound. Such electric circuit suppresses upper harmonics of diode characteristic and guarantees stable current and source voltage. The NEM IA-50 power adapter also serves to bring out lush powerful bass, lucid middle, and silky high tones—not without the help of fast pulse transmission from the amplifier. The powerful hybrid amplifier maintaining professional quality of sound makes the resonator of any dynamic speaker work to its best—every serious music lover dreams about it.

### NEM AI-50 features:

Massive front deck of artificial stone, polished & carved

Body of machined aluminum, 8 and 10 mm thick

Massive volume knob of aluminum

Buttons of machined ebonite

Gilded input jacks

Massive threaded copper terminals for speaker cables

Wear-resistant startup mechanics

All transformers and units are mechanically disconnected from the body

Four separate power adapters for the tube preamplifier stage and the output stage (separately by channels)

Also, an automatic circuit protection

High-quality electrolytic capacitors for audio equipment

No capacitors at the signal transmission section

Output protection circuit parallel to the signal transmission section

Remote control of input selection, volume, and sound off (RC5-Standard)

Electric circuit of the amplifier without negative feedback

EZ-81 rectifier for the driver section tube

Schottky barrier diodes for output transistors

### NEM IA-50 technical data:

Inputs: 3-line

Input resistance: 10 kOhm

Input sensitivity: 1.25 V

Amplitude-to-noise ratio (voltage): > 80 dB

Output resistance: < 0.1 Ohm

Minimum speaker impedance: 2 Ohm

Power output @ 8/4 Ohm: 2 x 50/2 x 100 W

Grid input: 230 W/50 Hz

Power input: 210 W

Dimensions (W x H x D): 48 x 23 x 49 cm

Weight (net/gross): 58/71 kg