

*Arkhipov's  
Laboratory*

**OWNERS MANUAL**



**Phones amplifier**

**UNIVERSAL DUAL SP. KENOTRON**

## DESCRIPTION

The "Universal Dual Sp. Kenotron" model is a high performance headphone amplifier with separate power supply. It is one of the amplifiers in the "Universal" range of *high-end* units offered by Arkhipov's Laboratory.

This amplifier is intended for use with the most demanding headphones available from any manufacturer and caters for any load impedance from **8 Ohms to 600 Ohms**.

It develops an output of **300mW** with a nominal input sensitivity of **350mV**. Two standard 1/4" (6.35mm) output jacks are fitted - one for loads in the range of 8 to 150 Ohms, the other for higher impedance headphones.

This model is a further development of the "Universal Dual Special" unit in Arkhipov's range of high end amplifiers with special attention being paid to the separate power supply. A vacuum tube rectifier ("kenotron") is employed to avoid "commutational transient" noise exhibited by solid state rectifiers. Coupled with a two stage L-C filter and high value capacitors this arrangement gives a clean and steady HT supply for the anodes of the output tubes.

Due to the warm up time of the rectifier cathodes, the new power supply also provides a slow ramp-up of HT supply which considerably increases the working life of the expensive output tubes. Tube filaments in the amplifier are powered by DC supplied by fast-acting Schottky diode rectifiers.

Interconnection between the amplifier and power supply is by special cabling with bayonet type fittings. This form of construction completely eliminates any induction interference between the power and output transformers or other elements of the amplifier. Together with many other technical features of the design, this results in a brilliant, unequalled sonic signature.

The tube complement of the amplifier comprises three high quality NOS items: a **Sylvania 6SN7GTB** and two English **Mullard**

**EL822.** Other features include: rhodium plated RCA connectors by **Cardas Audio**, **ALPS** volume control potentiometer (switcher), boron-carbon fixed resistors and paper-oil capacitors in the signal path. Electrolytic capacitors are by **Rubicon** and **Matsushita**.

Specially designed high-inductance output transformers with tape-wound cores are a major feature. These are hand wound with silk covered copper wire.

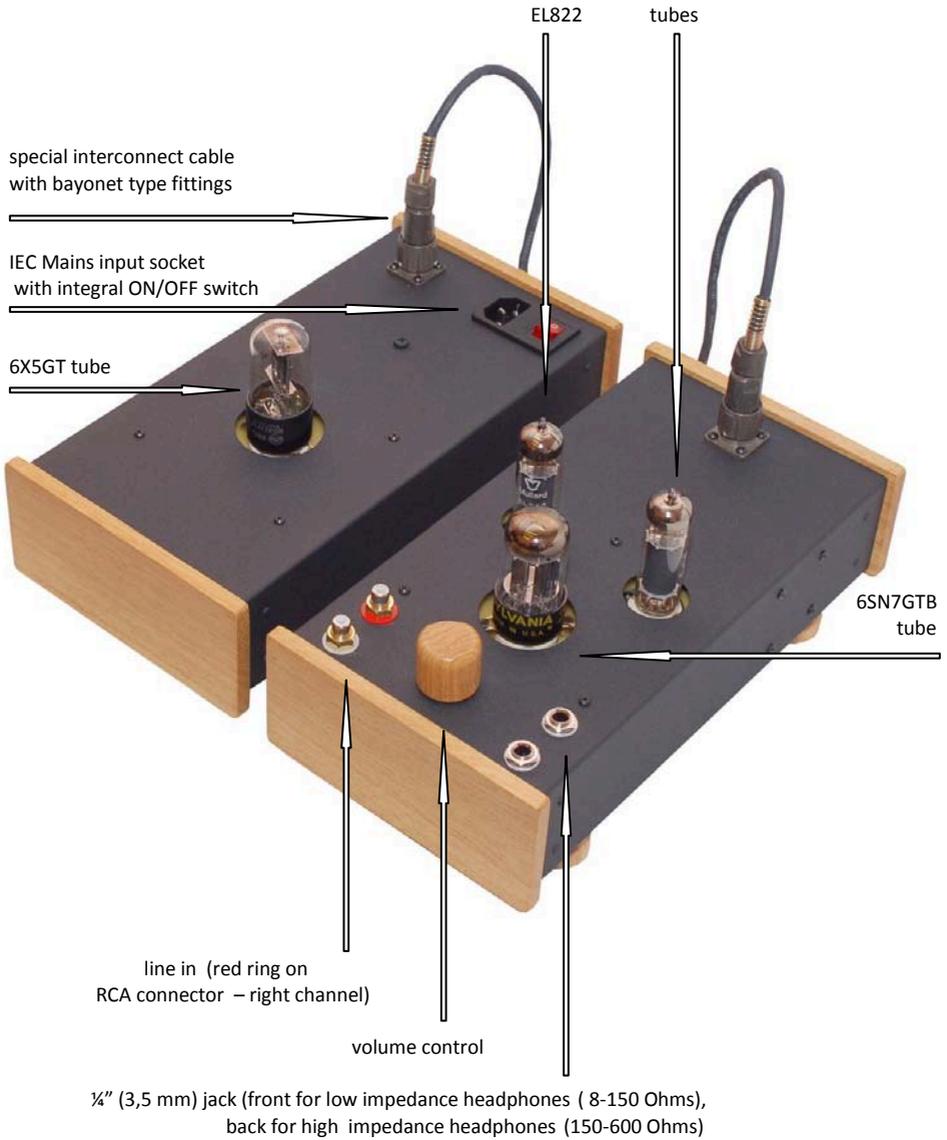
The power supply uses an **RCA 6X5GT** rectifier fed by a massive toroidal power transformer. Rectifier output passes through two-stage L-C filtering with **ELNA** electrolytic capacitors. The units are assembled entirely by hand with teflon insulated wire used throughout, minimising signal absorption.

Our “Universal Dual Sp. Kenotron” amplifier possesses excellent technical characteristics, with superb frequency response and minimal non-linearity and intermodulation distortion. It displays an extremely pleasing sonic signature, powerful expressive bass combined with smooth mid-frequency response and silky highs.

## BRIEF SUMMARY OF FEATURES

- Class A operation
- No local or overall feedback
- Toroidal power transformer
- High inductance output transformers with tape-wound cores
- Teflon insulated wire for minimal absorption of music signals
- High quality NOS tubes: Sylvania 6SN7GTB, Mullard EL822 and RCA 6X5GT
- Rhodium plated RCA connectors by Cardas Audio
- ALPS volume control
- Paper and oil capacitors in the signal path
- Carbon resistors
- Amplifier electrolytic capacitors by Rubicon, Matsushita and ELNA
- Timber panel of both the amplifier and power supply are high quality, solid European wood, with a choice of oak, ash, cherry or beech.
- Lifetime warranty

## VIEW



## TECHNICAL SPECIFICATIONS

Frequency range	20 Hz – 30 kHz
Input resistance	50 kOhms
Input Sensitivity	350 mV
Rated output	300 mW
Power	about 30 W
Headphone Impedance	8 - 600 Ohms
Input jacks	RCA
Output jacks	¼" (6,3 mm)
Type of tubes	1 x 6SN7GTB Sylvania, 2 x EL822 Mullard, 1 x 6X5GT RCA
Type of power supply	Separate
Mains voltage	230 V
Dimensions, mm (WxDxH)	Amplifier - 155x290x160-170 Power Supply - 155x290x140
Weight	Amplifier –3 kilos Power Supply – 3,5 kilos