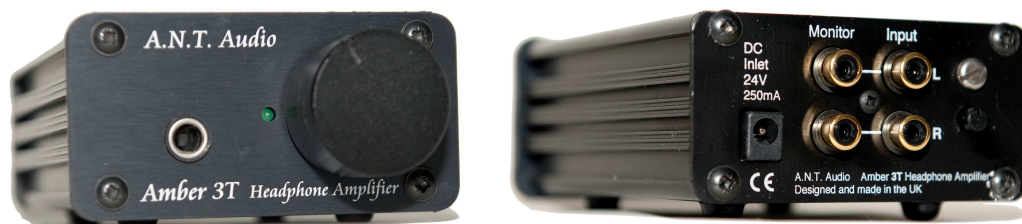


A.N.T. Audio “Amber 3T” headphone amplifier



Building upon the success of the award-winning A.N.T. Audio **Kora 3T** phono stage, new **Amber 3T** headphone amplifier uses the same **FET-only, class A, single-ended** philosophy. Suitable to use with headphones from 25 to 300 Ohm impedance and a variety of line-level sources, the Amber 3T provides an excellent sound quality in a small package. Two versions of the headphone amplifier are available:

The Classic (Green LED) employs high quality components, including **Panasonic FM** series for output and power supply capacitors and comes with a switch-mode univoltage power supply.

The Special Edition (Amber LED), on the other hand, sports **27 mm Alps Blue Velvet** volume potentiometer, user adjustable **FET biasing**, upgraded **ELNA Starget** output capacitors and comes with a switch-mode univoltage power supply.

The Special Edition Plus (Amber LED) is the same as the Special Edition, but comes with a high quality **linear power supply**.

Specifications:

Input Impedance	20 kOhm
Maximum Gain	20 dB
Frequency Range (100 Ohm load, -1 dB)	Better than 20 Hz – 20 kHz
THD @ 1 kHz , 1V RMS output into 100 Ohm load (10 mW)	Less than 0.5%, mostly second harmonic
Max. output @ 3% THD (sinewave 20 Hz- 20 kHz), each channel	More than 2.5 V RMS into 100 Ohm load (more than 62.5 mW each channel)
Output impedance @ 1 kHz	Less than 10 Ohm
S/N ratio, A-wtd, at 1V RMS output	Better than 90 dB
Supply current	Less than 250 mA
Supply voltage	24 V DC \pm 10%
Case	Anodised Aluminium Alloy
Printed Circuit Board (PCB)	Double-Sided Silver-Plated
Environmental	Lead-Free Technology

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User Guide

The Amber 3T headphone amplifier can be used with the majority of high quality headphones, from 25 Ohm to 300 Ohm impedance. It provides the necessary gain up to 20 dB and can be connected to a line level output of audio equipment, such as phono stages, tape decks, CD players, preamplifiers etc. etc. . The source output should be connected to the “Input” terminals at the back of the headphone amplifier, with a suitable Phono-to-Phono audio cable and if required the source can be chain-linked to another equipment using the "Monitor" sockets positioned next to the inputs (internally these two pair of sockets connected in parallel) . All these connections should be made before powering the unit up. The headphones are plugged in to the front 6.3 mm stereo jack socket. On the front also positioned the volume control knob. Please take care setting the volume as the amplifier is capable of driving many headphones to high sound pressure levels.

The Amber 3T requires power from an external 24V DC power supply adapter (provided with each unit). The preamplifier usually requires about 20-30 min warm-up before it reaches its full potential, so it is advisable to leave it on continuously – the power consumption is less than 6W. Each unit also requires at least 3-4 days to run in from new.

The Amber 3T Special Edition (“SE”) version features a control knob to "fine tune" the DC operating point of the circuit. This knob is positioned to the right from the input sockets at the back of the unit. This adjustment gives the user additional control over the headphone amplifier sound by slightly changing the DC bias of the circuit and hence its transfer function, thus affecting the sound of the amplifier-headphones system. Using this knob the Amber 3T can be somewhat “tuned” for a particular pair of headphones. The knob has an indicator mark on it so the position of an adjustment can be established clearly. Factory Pre-Set is on “12 o’clock” and the knob can be turned from about “7-30” to “5-30”. This adjustment cannot be done in a quick fashion like operating volume or tone controls on the amplifier. The circuit requires about 2-3 min to settle after a change of the control knob position, so the adjustment has to be made in small steps – waiting every time for the circuit to settle before listening for a change in the sound.