



## Preliminary User Manual

**AX-1121T**

**AX1240T**

**AX-1400T**

## **Professional 1-Channel Power Amplifiers**



### **Introduction**

We are pleased that you decided to use an axxent power amplifier. Please read the following instruction to obtain the maximum results.

### **Important Functions and Features:**

axxent amplifiers with the „T“ in the model name feature fully isolated constant voltage outputs for loudspeakers with built-in constant voltage transformers. Models AX1121T, AX1240T and AX1400T also have low impedance outputs to drive 4 Ohms or 8 Ohms loudspeakers.

Model AX1121T has 120 watt power, AX1240T 240 w and AX1400T 400 w of rms power. This the total power with the constant voltage outputs with either 50 v, 70 v or 100 v or low impedance. All amplifiers drive loudspeakers with load impedances as low as 4 ohms.

Front panel of the amplifier model AX1240T:



### Front Panel Controls:

All control elements and connectors of the three models AX1121T, AX1240T and AX1400T are identical. What you see on the front panel is solely the gain control or commonly “volume control”.

Three leds indicate “power on”, signal presence and peak level. Peak level led indicates the maximum tolerable audio input level.

Amplifier Rear Side, Model AX1121T:



Rear of the models AX1240T, AX1400T:



## **Amplifier Controls and Connectors, Rear:**

At the far left you can see the large power switch and below the IEC connector with the fuse holder. Intentionally we do not use an integral power cable so that the amplifier may be removed from a 19" rack without untangling the power cable. The IEC power cable is always included in the amplifier carton, when shipped.

If you should ever encounter an amplifier problem, i.e. you have switched it on and the green power led does not light, its fuse may be defective. A defective fuse should be changed by a qualified service technician.

Power fuse values are as follows:

AX1121T and AX1240T slow blow 4 A; AX1400T slow blow 6.3 A. Fuse type 5 by 20 mm.

## **Output Connectors, Constant Voltage:**

To the right of the power switch you can see the green Euroblock connector. This connector is used for the constant voltage outputs and indicated 50 v, 70 v and 100 v. Standard constant voltage in Europe is 100 v.

The Euroblock is a solderless connector that uses screw terminals to clamp connecting wires. Once the wires are installed, the entire assembly is plugged into a matching socket in the electronic device. Euroblocks are more convenient than the terminal strips they replace as the signal cables can be quickly disconnected from or connected to the electronic device, rather than unscrewing and re-screwing each wire individually.

## **Output Connectors, Low Impedance:**

Above the xlr input connectors you find the dual binding posts that are used for the low impedance output of the amplifier. These binding posts are touch proofed according to international safety regulations.

You may operate the amplifiers at 4 ohms with full power and all times. Please note, however that in this case you may not use the constant voltage outputs. It is important to know that combined power of simultaneous use of both constant voltage and low impedance outputs may not be higher than the r.m.s power of the amplifier. For example, if you use an 8 ohm speaker at the low impedance output connector, you will take approximately two thirds of the total available power and the other third then may be used to drive 100 v loudspeaker lines.

### **Amplifier Input Connectors:**

The amplifiers use fully balanced inputs for minimum interference. The input is a three pin female xlr connector and the “send” xlr connector is meant to route the input signal to additional amplifiers. All standard microphone cables may be used to connect the amplifier. Inputs are electronically balanced and have a nominal impedance of 20 kohms.

### **Amplifier Cooling:**

Amplifier models AX1121T and AX1240T use convection cooling. Heat transfer is by the rear heat sink. Because no fan is being used to transfer heat, there is no noise at all.

### **Fan Cooling:**

R.m.s. power of the model AX1400T is 400 w. This amount of power may not be dissipated by a heat sink alone. Therefore, an additional fan is used to support the heat sink in high power operation. In low power operation the heat sink alone transfers heat into the air. Conclusion: Low power operation no fan noise and with high power operation there is fan noise. However, in high power operation fan noise normally is not a problem.

CE Declaration of Conformity:

We herewith declare in sole responsibility that the products AX1121T, AX1240T and AX1400T are in conformity of EMC regulation 89-336-EEC and fulfills the requirements of the uniform product standard EN55013 (emission) and EN55020 (product immunity).