



user manual

Introduction

With your choice of this axxent professional amplifier you have decided on a high quality, reliable and rugged part of your sound system. In order to gain the maximum performance from this amplifier, we recommend to carefully read this manual. We tried to keep it as compact as possible.

Important functions and features

The axxent amplifier series with the additional designations „-T“ or „-TS“ feature separate and electrically insulated constant voltage outputs for loudspeakers or speaker lines with transformer coupling for constant voltage distribution.

The model AX2500-2TS provides two audio channels with 500 watts output power each. The most important features are the priority inputs, ensuring safe and secure emergency and paging calls via separate control voltage inputs.

On the following pages you will find compact information for set up and operation of the amplifier, separately for controls on the front and for the connections on the rear side.

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Controls on the front side

Knobs: The two „volume“ knobs determine the output level. The knobs are detachable and may be sealed with blind covers in order to provide secure protection against unintentional level changes.

LED indicators: Several LED's provide visual indication of the operational conditions. **ON** the unit is powered on. In case this LED is not lit upon activation of the power switch on the rear, you either lack mains voltage supply or the amplifier's fuse is faulty. In latter case please replace the fuse with a type "10 A, slow blow, 5x20 mm". If this doesn't help, the amplifier possibly might need servicing. Please contact a qualified service centre or ship the unit to the manufacturer axxent e.K. The amplifier case may only be opened by qualified service personnel!

SIGNAL this green LED indicates the presence of an audio signal within a safe level area.

PEAK these red LED's indicate the onset of the built in limiter, which protects the amplifier against excessive input signal levels. The input level is limited to 675 mV. Higher input level up to 22 dBu may be applied when reduced by the gain control potentiometers on rear side of the amplifier.

PROTECT with red LED's visually confirms the onset of the amplifier protection circuit. The amplifier is muted. This may occur in cases of amplifier overload. The shut-off time normally is quite short (appr. 10 s) and automatically returns to normal operation thereafter. In case of overheating the amplifier this period may occur prolonged until the unit has regained a safe operating temperature again.

Intentionally we have tried to do without additional operating elements (such as mains switch) in order to widely ensure safe and easy adjusting and handling.





Controls and connectors on the rear side

On the rear side of the amplifier you will note vertical slots on both sides, hiding the internal heat sinks of the output stages. These slots must be kept free from any obstruction in order to ensure steady airflow cooling from front to rear

Centrally located is the power on/off switch. **I** is on, **O** is out. Next to this switch you will find the IEC power cord plug with the fuse holder. As already said, the fuse is of a „10 A slow blow“ type. In case the green ON LED on the front side is not lit, please replace this fuse. If this doesn't help, the amplifier possibly might need servicing. Please contact a qualified service centre or ship the unit to the manufacturer axxent e.K.

Next to the IEC cord plug and the mains switch you will find the insulated output connectors. These „plug and screw“ terminals allow for safe and easy connection of the loudspeaker cables. The loudspeaker polarity is clearly marked with **+/-**.

Special features of the amplifier model AX2500-2TS are the priority inputs per channel. For further details please see the following page 4.



Special and most important features of the amplifier model AX2500-2TS are, as previously indicated, the **priority inputs per channel**.

Please keep in mind that this amplifier has two inputs per channel and in addition one each input for 24 volts control voltage. The second channel is intended for emergency paging in complex systems, such as in airports, shopping malls, stadiums etc.

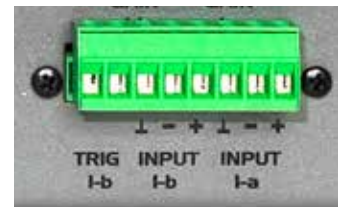
In systems with emergency pagings it is very important to keep them free from external interferences of any kind. This is the reason for providing a voltage control input. When applying an AC or DC voltage, at a threshold of appr. 6 volts the priority input channel will be activated, simultaneously muting the „normal“ background music input.

The control voltage input is labelled as „24 v control voltage“ the actual switch threshold however already is much lower, so that variations of the control voltage are less critical.

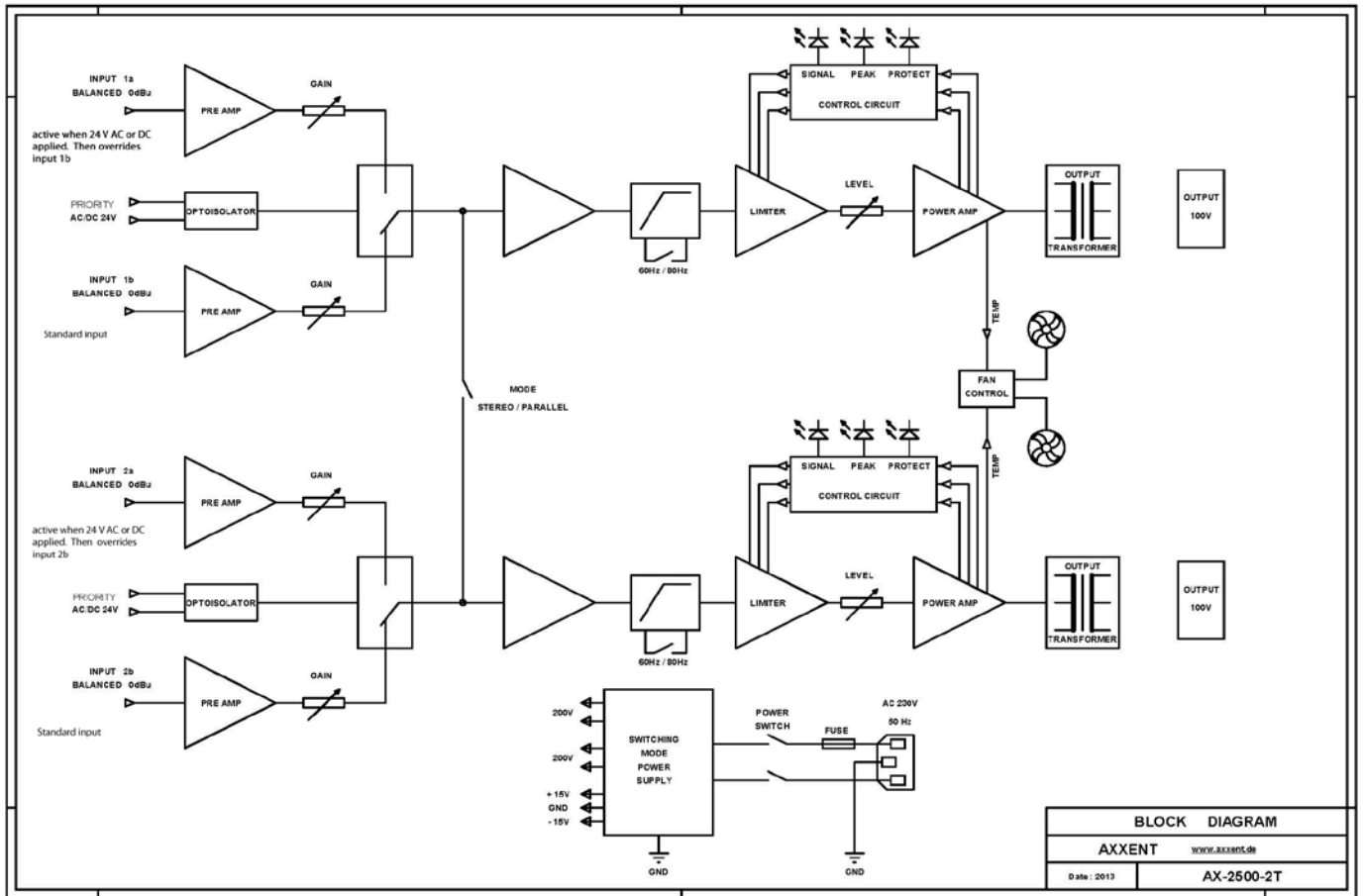
Inputs:

Input **b** is the standard input. A priority control voltage activates channel **a** and mutes channel **b**. Beside the inputs 1b and 2b (for example background music and normal pagings) inputs 1a and 2a exist for emergency paging and in addition a 24 volts input. In case an unwanted signal appears on inputs 1a and 2a, it could be interpreted as emergency paging - that's why the 24 volts control voltage. The control voltage together with the signals on inputs 1a and 2a leaves no room for misinterpretations. The control voltage may either be AC or DC since it is only used to control an opto coupling device. Also polarity of a DC is not critical. The control threshold is way under 24 volts so that down fluctuation is not critical. The inputs are equipped with a detachable Euroblock (Phoenix).

On the following page 5 you will find a block diagram of the amplifier circuit and an explanation of the input configurations.



Circuit diagram



Outputs

In systems with emergency paging facilities it is advisable to remove the detachable potentiometer knobs and apply the supplied blind knobs instead, so that in cases of emergency pagings the maximum amplifier level is retained.

The output connectors are of detachable, touch proof 2pin-Phoenix type.

On the following page 6 you will find a table for the gain controls.

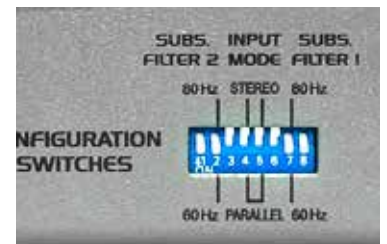
Gain adjustments on the rear side

For each channel and for each input **-b** and **-a** a gain control is provided allowing to also feed high level signals up to +22 dBu to the amplifier. In this case please watch the **PEAK** indicator on the front side of the amplifier. In any case at such high levels the indicator will be off. At signal peaks this is not critical.

CONFIGURATION SWITCHES

A nine segment DIP switch allows individual amplifier configurations.

		Down	Up
Limiter 2, Channel 2	Switch no. 1	ON	or OFF
Limiter 1, Channel 1	Switch no. 8	ON	or OFF
Subsonic Filter Channel 1	Switch no. 6	OFF	or ON
Subsonic Filter Frequency Channel 1	Switch no. 7	40 Hz	or 80 Hz
Subsonic Filter Channel 2	Switch no. 3	OFF	or ON
Subsonic Filter Frequency Channel 2	Switch no. 2	40 Hz	or 80 Hz
Input Mode	Switch no. 4+5	Parallel	or Stereo



For further questions regarding the operation of the amplifier please do not hesitate to contact the manufacturer, axxent e.K. : mail@axxent.de.

DECLARATION OF CONFORMITY

PRODUCT: LOW FREQUENCY POWER AMPLIFIER
 MODEL: AXXENT AX-2500-2TS TWO CHANNEL AUDIO AMPLIFIER

THE PRODUCT IS DESIGNED FOR AMPLIFYING ACOUSTIC FREQUENCY SIGNAL MAINLY USED FOR PUBLIC ADDRESS SYSTEMS.

PRODUCER OF ELECTRONIC DEVICES IN SUBJECT THIS DECLARATION OF CONFORMITY HEREBY DECLARES THAT EQUIPMENT SPECIFIED ABOVE IS IN COMPLIANCE WITH MENTIONED DIRECTIVES AND STANDARDS AND CONFORMS TO THE REQUIREMENTS OF THE HARMONIZED PRODUCT STANDARDS.

USED DIRECTIVES AND STANDARDS:

EMC REGULATION 2004/108/EG
 AND ESPECIALLY THEREFORE COMPLIES WITH EN61000-6-1 2007,
 ELECTRO-MAGNETIC SUSCEPTIBILITY FOR PRIVATE USE, COMMERCIAL USE AND LIGHT INDUSTRIAL APPLICATIONS ACCORDING TO TABLE 2.
 LOW VOLTAGE DIRECTIVE 2006/95/EG OF DECEMBER 12, 2006 REGARDING ELECTRICAL EQUIPMENT.

PRODUCER: AXXENT E.K.
 PLACE: 63571 GELNHAUSEN, GERMANY, ZUM WARTTURM 15
 DATE: 9. JANUARY 2014

NAME: JOSEF BECKER
 POSITION: OWNER
 STAMP AND SIGNATURE: