



I N S T R U C T I O N M A N U A L

# KBA X amp series

## Powerful audio amplifiers

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**KBA X500 | KBA X750 | KBA X1000 | KBA X1250 | KBA X1600**

Due to continuous product development, please ensure that you have downloaded the latest instruction manual for this product from the Kam website at [www.kam.co.uk](http://www.kam.co.uk)

For the latest updates and information on the entire Kam range visit:

**[www.kam.co.uk](http://www.kam.co.uk)**

Kam products are manufactured by: **Lamba plc**, Unit 1, Southfields Road, Dunstable, Bedfordshire, United Kingdom LU6 3EJ

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**Thank you for purchasing this Kam product, we are sure that it will serve you for many years to come.**

To optimise the performance of this product, please read these operating instructions carefully to familiarise yourself with the basic operations of this unit. Please retain them for future reference. This unit has been tested at the factory before being shipped to you.

To prevent or reduce the risk of electrical shock or fire, do not expose the unit to rain or moisture. To prevent a fire hazard, do not expose the unit to any naked flame sources. Unplug this apparatus during lightning storms or if it is unlikely to be used for long periods of time.

When installing the unit, please ensure you leave enough space around the unit for ventilation. Slots and openings in the unit are provided for ventilation to ensure reliable operation of the product and to protect it from overheating. To prevent fire hazard, the openings should never be blocked or covered.

Always handle the power cable by the plug. Never pull out the plug by pulling on the cable. Never touch the power cable when your hands are wet as this could cause an electric shock. Do not tie a knot in the cable. The power cable should be placed such that it is not likely to be stepped on. A damaged power cable can cause a fire or give you an electrical shock. Check the power cord periodically, if you ever find that it is damaged, replace it before using the unit again. Contact your retailer for a replacement.

The voltage of the available power supply differs according to country or region. Be sure that the power supply voltage of the area where this unit is to be used meets the required written on the unit.

**The lightning flash symbol inside a triangle is to alert the user to the presence high voltage within the unit's enclosure that may be of sufficient power to constitute a risk of electrical shock to persons.**

**Caution: to prevent the risk of electric shock, do not attempt to open the unit. No user-serviceable parts inside. Refer all servicing to qualified service personnel.**

**The exclamation mark inside a triangle is intended to alert the user to the presence of important operating and maintenance instructions in the literature accompanying the appliance.**

Select the installation location of your unit carefully. Avoid placing it in direct sunlight or locations subject to vibration and excessive dust. Do not use the unit where there are extremes in temperature (below 41°F / 5°C or exceeding 95°F / 35°C).

**Unpacking and safety** Please unpack your new product carefully. Your new product should reach you in perfect condition. Please check that no damage has occurred during transit. If any damage is found, do not operate your unit. Please contact the retailer you purchased it from immediately. If there is any damage to the mains cable do not use the device. Always disconnect the unit from the mains supply when carrying out any cleaning of the unit.

#### Manufacturer declarations



In compliance with the following requirements: **RoHS Directive (2002/95/EU)** and **WEEE Directive (2002/96/EU)**. If this product is ever no longer functional please take it to a recycling plant for environmentally friendly disposal.

#### CE declaration of conformity

R&TTE Directive (1999/5/EU), EMC Directive (2004/108/EU), Low Voltage Directive (2006/95/EU).

The declarations are available on application from [certification@lambpalc.com](mailto:certification@lambpalc.com)

Before putting the devices into operation, please observe the respective country-specific regulations.

#### Important for UK customers

The wires in the mains lead are coloured in accordance with the following code:

Green/yellow = Earth / Blue = Neutral / Brown = Live / **This appliance must be earthed.**

**Connections** Connect the output of a pre-amplifier or mixer to the jack inputs. The input signal should be of line level. The maximum output power is obtained when connecting 4 Ohm speakers. It is also possible to connect 8 Ohm speakers; however, the output power will decrease in this case. The speakers must have a power rating higher than the output of the amplifier. Connect the output of the amplifier to suitable speakers via either the left and right speakeron connectors. The majority of PA speakers available are 8 Ohms. By connecting two 8 Ohm speakers together, their rating becomes 4 Ohms, therefore, if you attach two connected speakers to each channel, you will achieve the maximum power output of the amp. Do not connect two 4 Ohm speakers to each channel as this will reduce the load to 2 Ohms which is not recommended for this type of amplifier.

**Switching On/Off** In order to avoid loud switching noise, always switch on all other units in an amplifier system before switching on the power amplifier, and switch it off first after operation. Before switching the unit on or off, always turn the volume dials to their minimum settings. After switching on, the **PROTECT** LED lights up for approximately one second. During this time the switch-on delay is activated to protect speakers.

**Level adjustment** Set the output of the mixer or pre-amplifier to its rated level (0dB) or to the highest undistorted output signal. Turn up the controls so far until the maximum desired volume is reached. If the red **CLIP** LED illuminates (showing an overload of the amplifier), reduce the channel gain.

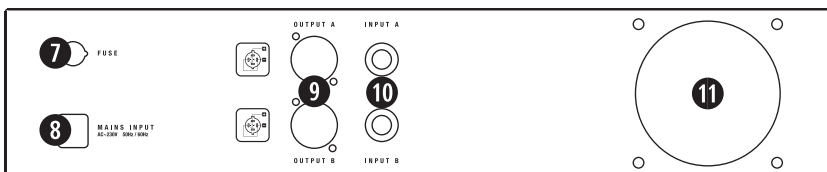
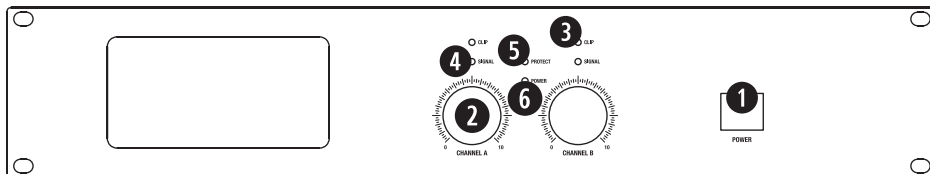
**Protective circuit** The protective circuit is provided to prevent damage to the speakers and the amplifier. If it is activated, the yellow **PROTECT** LED will light up:

1. Approximately one second after switching on (soft start).
2. If the amplifier is overheated, or if a short circuit has occurred at a speaker output the **CLIP** LED of the corresponding channel lights up. If this is the case or if the yellow **PROTECT** LED lights up during the operation or if it is not extinguished after switching on, the amplifier must be switched off and the cause for the defect needs to be eliminated.

### Controls and connections

1. Power switch
2. Channel volume controls
3. Channel Clip LED indicators
4. Channel Signal LED indicators
5. Channel A/B Protect LED indicator
6. Power Indicator LED
7. Fuse
8. AC mains input
9. Speakeron output
10. Unbalanced Jack input
11. Fan

### Front and rear panels



## Technical specification

### **Kam KBA X500**

500 watt power amplifier

2 x 250w per channel

2 x 125w RMS @ 4 Ohms

2 x 80w RMS @ 8 Ohms

Voltage: 115/230V 50/60Hz / Fuse: AC230V = T2A/250V

S/N:  $\geq 95$ dB / Frequency response: 10Hz-20KHz

Input sensitivity: 1.228V / THD(1KHz/50W):  $\leq 0.1\%$

Protection: Overload / Neutral / Delayed On

### **Kam KBA X750**

750 watt power amplifier

2 x 375w per channel

2 x 185w RMS @ 4 Ohms

2 x 105w RMS @ 8 Ohms

Voltage: 115/230V 50/60Hz / Fuse: AC230V = T3.15A/250V

S/N:  $\geq 95$ dB / Frequency response: 10Hz-20KHz

Input sensitivity: 1.228V / THD(1KHz/50W):  $\leq 0.1\%$

Protection: Overload / Neutral / Delayed On

### **Kam KBA X1000**

1000 watt power amplifier

2 x 500w per channel

2 x 250w RMS @ 4 Ohms

2 x 160w RMS @ 8 Ohms

Voltage: 115/230V 50/60Hz / Fuse: AC230V = T5A/250V

S/N:  $\geq 95$ dB / Frequency response: 10Hz-20KHz

Input sensitivity: 1.228V / THD(1KHz/50W):  $\leq 0.1\%$

Protection: Overload / Neutral / Delayed On

### **Kam KBA X1250**

1250 watt power amplifier

2 x 625w per channel

2 x 315w RMS @ 4 Ohms

2 x 225w RMS @ 8 Ohms

Voltage: 115/230V 50/60Hz / Fuse: AC230V = T8A/250V

S/N:  $\geq 95$ dB / Frequency response: 10Hz-20KHz

Input sensitivity: 1.228V / THD(1KHz/50W):  $\leq 0.1\%$

Protection: Overload / Neutral / Delayed On

### **Kam KBA X1600**

1600 watt power amplifier

2 x 800w per channel

2 x 400w RMS @ 4 Ohms

2 x 260w RMS @ 8 Ohms

Voltage: 115/230V 50/60Hz / Fuse: AC230V = T8A/250V

S/N:  $\geq 95$ dB / Frequency response: 10Hz-20KHz

Input sensitivity: 1.228V / THD(1KHz/50W):  $\leq 0.1\%$

Protection: Overload / Neutral / Delayed On

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