INSTRUCTION MANUAL

KD amplifer series

Compact and powerful digital amplifiers

MANUAL VERSION 3.0

12-01-15

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

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

www.kam.co.uk

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Made in China. Due to continuous product development, specifications and appearance are subject to change. © Copyright Lamba plc. E&OE.

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.

The unit is powered by mains electricity, 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 periodicaly, 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 41ºF / 5ºC or exceeding 95ºF / 35ºC).

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.

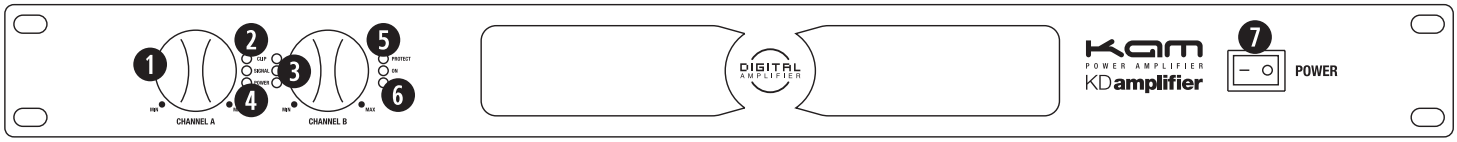
CE declaration of conformity
R&TTE Directive (1999/5/EU), EMC Directive (2004/108/EU), Low Voltage Directive (2006/95/EU).
The declarations are available on application from certification@lambaplc.com
Before putting the devices into operation, please observe the respective country-specific regulations.

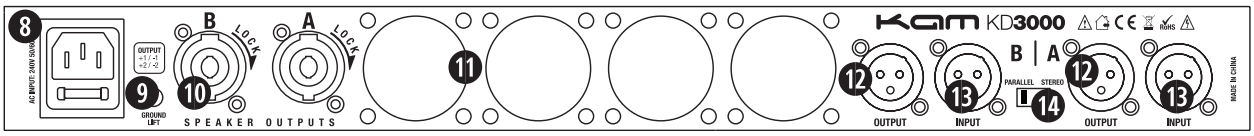
Connections Connect the output of a pre-amplifier or mixer to the audio inputs. The input signal should be of line level. The maximum output power is obtained when connecting 4 Ohm speakers. It is also possible to connect 8 Ohm speakers; however, the output power will decrease in this case. The speakers must always 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 output 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 a 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.

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 **CLIP** LED illuminates (showing an overload of the amplifier), reduce the channel gain.

Front and rear panels (rear panel dependent on model purchased)





Controls and connections

1. Channel volume/gain controls
2. Channel Clip LED indicators
3. Channel signal LED indicator
4. Channel power indicator LED
5. Signal protect LED indicator
6. Output mode LED indicator (bridge/parallel)
7. Power switch
8. IEC AC mains input
9. Ground lift switch
10. Speaker output connectors (speakon)
11. Cooling fans
12. XLR output connectors
13. XLR input connectors
14. Output mode switch (see below)

Output modes Each Kam KD digital power amplifier has different output modes.

Stereo mode sends the signal from each channel to the corresponding audio output (e.g. channel A input > channel A output).

Parallel mode creates a mono (single) signal which is fed to both channels.

Bridge mode (if applicable) sends both A and B channels to a single audio output, thus doubling the output voltage of the amplifier. Ensure that any speakers connected to the bridge output of the amp are able to handle this increased voltage and that they are of the correct impedance.

The Kam **KD1000** is able to switch between Stereo, Parallel and Bridge modes.
The Kam **KD3000** is able to switch between Stereo mode and Parallel mode.

Clip red LED indicator Lights up when the audio is excessive, the audio is likely to be distorted. Ensure that the audio signal is set to its rated level (0dB), then set the audio input using the volume/gain control on the amp.

Signal yellow LED indicator Lights up when a sufficient signal has been received via the audio inputs.

Channel Power green LED indicator Lights up when channel is powered on.

Protection red LED indicator Lights up when the amplifier's protection mode is activated.

On green LED indicator Lights up when mains power is attached and the unit is powered on.

Mode LED indicator Lights up when parallel/bridge mode is activated.

Technical specifications

Kam KD1000

Stereo power output	2 x 570w @ 4 Ohms RMS
	2 x 350w @ 8 Ohms RMS
Frequency response	20Hz - 20KHz
Maximum input level	21dB / 9V
Input sensitivity	0.77V / 32dB / 1.0V
Input resistance	20 KOhms balanced
S/N ratio	≥80dB
Input connections	XLR
Output connections	XLR / speakon
Power supply	AC 240V 50/60Hz
Operating temperature	-7 to 50°C
Dimensions (WxDxH)	482 x 212 x 44mm
Weight	3.6Kg

Kam KD3000

Stereo power output	2 x 1600w @ 4 Ohms RMS
	2 x 1000w @ 8 Ohms RMS
Frequency response	5Hz - 30KHz -0.5dB
Maximum input level	21dB / 9V
Input sensitivity	0.77V / 32dB / 1.0V
Input resistance	20 KOhms balanced
S/N ratio	≥80dB
Input connections	XLR
Output connections	XLR / speakon
Power supply	AC 240V 50/60Hz
Operating temperature	-7 to 50°C
Dimensions (WxDxH)	482 x 330 x 44mm
Weight	6Kg