INSTRUCTION MANUAL

KXD3200/4400/6000/7200

1U rack mounting digital power amplifiers

MANUAL VERSION 1.0

22.06.2010

Stereo, mono and bridge mode operation with peak level LEDs
3 x optional sensitivity setting available: 26dBb / 32dB / 1.4V
Balanced XLR outputs plus Speakeron outputs / Balanced XLR inputs
Advanced switch-mode power supply technology for high performance
Soft start, clip limiter, power limiter, thermal cut, DC, AC, short circuit
Power limiter: prevents severely clipped waveforms reaching the loudspeakers, whilst maintaining full peak power
Upgraded cooling fan with magnetic suspension technology and low noise
Frequency response: 5-36KHz - 1dB | Input sensitivity: 26dB / 32dB / 1.4V
S/N ratio: 100dB | THD: 0.04% | Damping (8 Ohms/1KHz): 280
Input impedance: 10 KOhms unbalanced / 20 KOhms balanced
Slew rate: 29V/uS / Crosstalk@rated output 8 Ohms 1KHz A-B: 75dB / B-A: 90dB
Power supply: 100~240V AC 50/60Hz
Compact size - 19 inch width x 1U height x 334mm depth
Weights: KXD3200/4400 - 5.6Kg / KXD6000/7200 - 6.0Kg

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

www.kam.co.uk

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Thank you for purchasing this 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. After you have read the instructions, 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 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 intended 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.

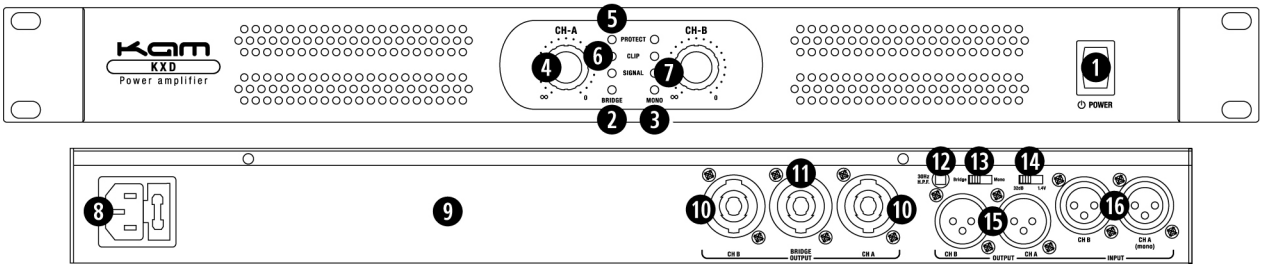
Any modification carried out on the unit may invalidate the unit's warranty.

If applicable, only use the stand, tripod or bracket specified or sold with the apparatus.

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 servicing or cleaning of the unit.

The serial number for this equipment should be located on the rear or underside of the unit. Please make a note of this number as you will need it for your warranty, it is a good idea to keep a copy of the serial number for your own records.



1. POWER switch
When pressed, the soft start circuit will run thus avoiding a power surge. After 3-4 seconds, there will be a clicking noise that indicates that the soft start process has finished. After a further 1-2 seconds there will be another clicking noise to indicate that the amplifier is now working.

2. BRIDGE MODE LED
This LED will be lit when the amplifier is operating in Bridge Mode.

3. MONO MODE LED
This LED will be lit when the amplifier is operating in Mono Mode.

4. CHA/CHB input level control
Adjust to acheive the desired volume. Only use CHA control when running the amplifier in Bridge or Mono Mode.

5. CHA/CHB protection indicating LEDs
The LEDs will be lit in the following three conditions:
After turning on or turning off the amplifier the LEDs will light temporarily.
When the amplifier temperature is over 85ºC.
When there is a fault with the amplifier.

6. CHA/CHB peak level indicating LEDs
The LEDs will be lit in the following situations:
When the output signal has reached its clipping level, the LED lights; possibly resulting in distortion. Should this occur, adjust the input level control so that the Peak LED turns off.
If the input signal is too loud and the Peak LED lights continuously, but no sound is heard from the amplfier, it is possible that there has been a short circuit. You should turn off the amplifier. Find out where the trouble is and renew operation.

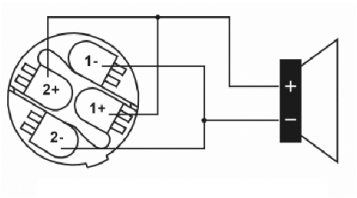
7. CHA/CHB signal indicating LEDs
This LED will be lit when the amplifier is working normally.

8. MAINS input
Connect the supplied mains cable to the IEC socket and integrated fuse holder.

9. FAN & ventillation apertures
During operation, the amplifier produces heat that must be dissipated. The fans inside the amplifier must be able to evacuate the heat in the most effective way. Therefore is it very important not to cover any of the ventilation openings as this may result in overheating.

10. L+R SPEAKERON outputs
Use these connectors to connect your speakers (impedance >4ohm) in stereo or mono mode. Wiring of these connectors is as follows:
POS(+) = PIN1+ and PIN2+ / NEG(-) = PIN1- and PIN2-

11. BRIDGE SPEAKERON output
Use this connector to connect your speaker cabinet (impedance >8ohm) in Bridge Mode. Wiring of this connector is as follows:
POS(+) = PIN1+ and PIN2+ / NEG (-) = PIN1- and PIN2-



Speakeron wire connection

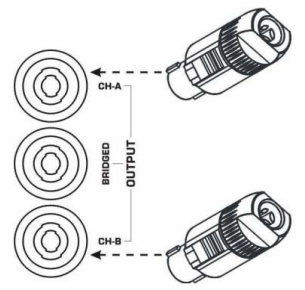
12. 30Hz LOW CUT FILTER
This eliminates unwanted subsonic frequencies under 30Hz. In most cases these frequencies consume a lot of energy without adding any value to the music.

13. OPERATION MODE switch
Used to set the operation mode of the amplifier. The most common operation mode is Stereo. If you need more power, you can operate the amplifier in Bridge mode. In mono mode you only have to connect the CHA input to both outputs.

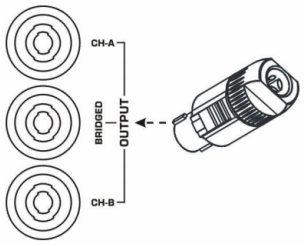
14. INPUT SENSITIVITY switch
Choose one of three different input levels: 26 dB / 32 dB / 1.4V

15. BALANCED XLR outputs
Can be used to send the signal to another amplifier. Pin1: signal ground / Pin2: signal+ / Pin3: signal –

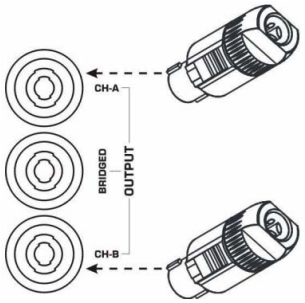
16. BALANCED XLR inputs:
Pin 1: signal ground / Pin 2: signal+ / Pin3: signal-



STEREO OPERATION
Connect the audio signal (e.g. music) to the inputs (16).
Set the operation mode switch (13) to Stereo.
Connect the matching speakers to the L+R Speakeron outputs (11).
Set both input gains (2) to zero.
Make sure that there is an audio signal.
Turn the amplifier On (8).
Adjust the input gains (2) to the desired level.



BRIDGE OPERATION
Connect the audio signal (e.g. music) to the CHA input (16).
Set the operation mode switch (13) to Bridge.
Connect the matching speaker(s) to the Bridge output (12).
Set both input gains (2) to zero.
Make sure that there is an audio signal at the CHA input.
Turn the amplifier on (8).
Adjust the CHA input gain (2) to the desired level, leave the CHB channel gain at zero.



MONO OPERATION
Connect the audio signal (e.g. music) to the CHA input (16).
Set the operation mode switch (13) to Mono.
Connect the matching speakers to the L+R outputs (11).
Set both input gains (2) to zero.
Make sure that there is an audio signal at the CHA input.
Turn the amplifier on (8).
Adjust the CHA input gain (2) to the desired level, leave the CHB channel gain at zero.

TECHNICAL SPECIFICATIONS

Model			**KXD3200**	**KXD4400**	**KXD6000**	**KXD7200**
Output power EIA 1KHZ 1% THD	Stereo	8Ω	400w RMS+400w RMS	550w RMS+550w RMS	750w RMS+750w RMS	900w RMS+900w RMS
		4Ω	1600w+1600w 800w RMS+800w RMS	2200w+2200w 1100w RMS+1100w RMS	3000w+3000w 1500w RMS+1500w RMS	3600w+3600w 1800w RMS+1800w RMS
	Bridge	8Ω	1600w RMS	2200w RMS	3000w RMS	3600w RMS
Frequency range			5-36KHz / -0.5dB,			
Input Sensitivity			26dB / 32dB / 1.4V			
S/N Ratio			≥ 100dB			
Distortion (typical)			Less than 0.04%			
Distortion (SMPTE)			Less than 0.04%			
Input Impedance			10Kohms unbalanced, 20Kohms balanced			
Damping Factor (5Hz-1KHz)			≥ 280			
Slew Rate			29V/uS			
Crosstalk @ Rated Output 8Ω1KHz			A-B 75dB , B-A 90dB			
Protection			Soft start, DC, AC, short circuit, clip limiter, thermal cut, power limiter			
Dimensions (W*D*H)			482 x 334 x 44 mm			
N.W.			5.6 Kg	5.6 Kg	6.0 Kg	6.0 Kg
Mains Power Supply			110V AC 60Hz / 240V AC 50Hz			

The Kam KXD series amplifiers are designed for single voltage only. Please ensure that the unit matches your local power supply.