

array K

USER MANUAL

KA7 KA7-7





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KA line KA7/KA7-7

High technology Class D power amplifier

1. INTRODUCTION

The KA professional rack amplifier line has been designed to give answers to all the needs of touring and installation applications in which a large amount of power is needed together with the maximum flexibility, over low sizes and weight. The sophisticated electronics on-board allow to reach outstanding output power levels with over-high efficiency. DSP on-board can provide perfect signal processing for all K-array products, providing safe working conditions and a large choice of dedicated presets to solve the most parts of the needs of high-end applications.



2. UNPACKING







Each K-array device is built to the highest standard and thoroughly inspected before leaving the factory. Carefully inspect the shipping carton, then examine and test your new product. If you find any damage immediately notify the shipping company. Only the consignee may institute a claim for damages incurred in shipping. It is suggested that you retain the original packaging so that the system can be repacked at a future date if necessary. Please note that K-array and its distributors cannot accept any responsibility for damage to any returned product through the use of non-approved packaging.

3. INCLUDED ACCESSORIES

- 2 Rack adapters
- 10 screws, M5x10mm
- 2 screw nut M3
- 2 xlr Neutrik cable mt. 0,5
- 1 power link cable mt. 0,5
- 1 adjustment pen screwdriver
- 1 User's manual



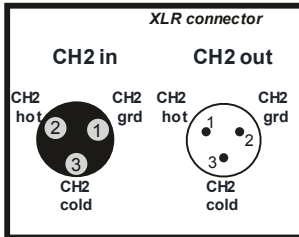
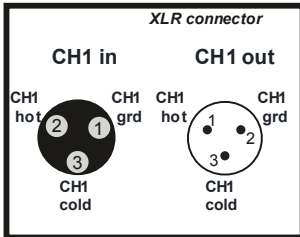
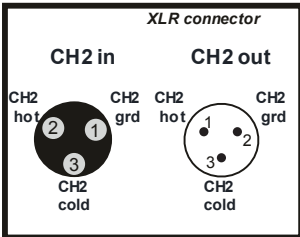
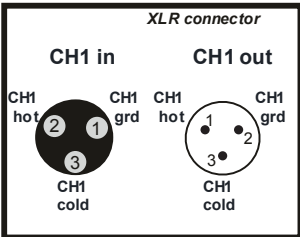
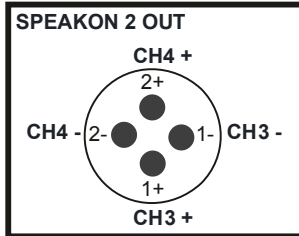
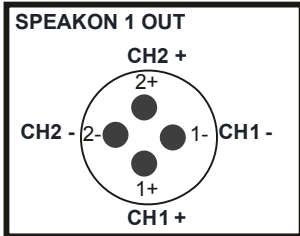
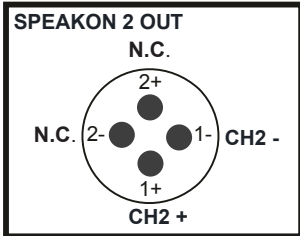
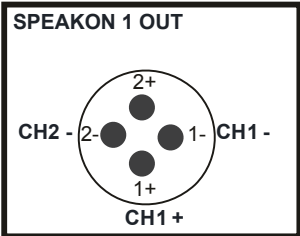
4.SYMBOLS

 <p>This symbol, wherever it appears, alerts you to important operating and maintenance instructions in the accompanying literature. Read the manual!</p>	 <p>Warning! Dangerous voltages: RISK of electric shock.</p>	 <p>This device complies with Restriction of Hazardous Substances Directive.</p>
 <p>Separate collection of electrical and electronic devices. For information about the disposal of Waste Electrical and Electronic Equipment (WEEE), please refer to the website at www.scanning.datalogic.com</p>	 <p>The item meets all the essential "Health and Safety" requirements of the relevant European Directives.</p>	 <p>This symbol alerts the user to the presence of recommendations about product's use and maintenance.</p>

5.WIRING

KA7

KA7-7





6. WARRANTY

K-array KA7-7 are warranted against manufacturing defects in materials or craftsmanship over a period of 2 years from the date of original purchase. During the warranty period K-array will, at its discretion, either repair or replace products which prove to be defective provided that the product is returned in its original packaging, shipping prepaid, to an authorized K-array service agent or distributor. K-array cannot be held responsible for defects caused by unauthorized modifications, improper use, negligence, exposure to inclement weather conditions, act of God or accident, or any use of this product that is not in accordance with the instructions provided by K-array.

K-array is not liable for consequential damages.

This warranty is exclusive and no other warranty is expressed or implied.

This warranty does not affect your statutory rights.

7. SAFETY INSTRUCTION



WARNING



- To reduce the risk of electric shock, disconnect the amplifier from the AC mains before installing audio cable. Reconnect the power cord only after making all signal connections.
- Connect the amplifier to a two-pole, three wire grounding mains receptacle. The receptacle must be connected to a fuse or circuit breaker. Connection to any other type of receptacle poses a shock hazard and may violate local electrical codes.
- Do not install the amplifier in wet or humid locations without using weather protection.
- Do not allow water or any foreign object to get inside the amplifier. Do not put objects containing liquid on, or near, the unit.
- To reduce the risk of overheating the amplifier, avoid exposing

it to direct sunlight. Do not install the unit near heat emitting appliances, such as a room heater or stove.

- No naked flame sources such like lighted candles should be placed on the device.
- The amplifier should be placed so that its location does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, carpet, or similar surface that may create an obstacle for the ventilation openings.
- CAUTION, RISK OF ELECTRIC SHOCK, DO NOT OPEN. This amplifier contains potentially hazardous voltages. Do not attempt to disassemble the unit. The unit contains no user serviceable parts. Repairs should be performed only by factory trained service personnel.
- Be sure that both voltage set by the selector on the device and AC Power have the same value.

8. VOLTAGE REQUIREMENTS



KA7 and KA7-7 operate safely and without audio discontinuity if the AC voltage stays within a operating window from 90 V to 260 V.

Check the voltage before connecting the amplifier to the AC power.

A higher voltage could seriously damage the device.

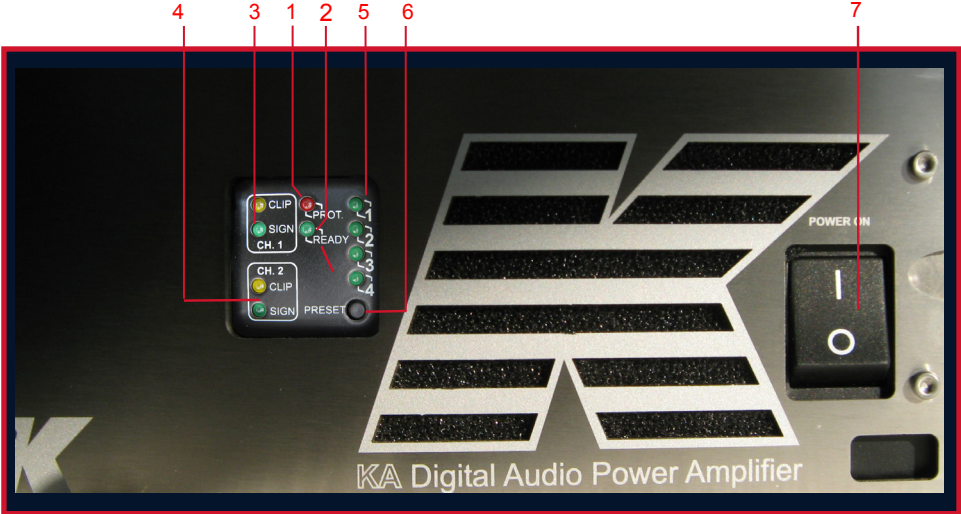
9. FEATURES

- Autorange operating power
- Compact design, 2U half rack for 4 chs
- Optical limiter
- Integrated 4-pin Phoenix connector
- Electronically protected
- Over-high efficiency
- DSP on board with 4 different presets
- Available in Black or Aluminum
- Top quality components for outstanding performances
- Aluminium frame



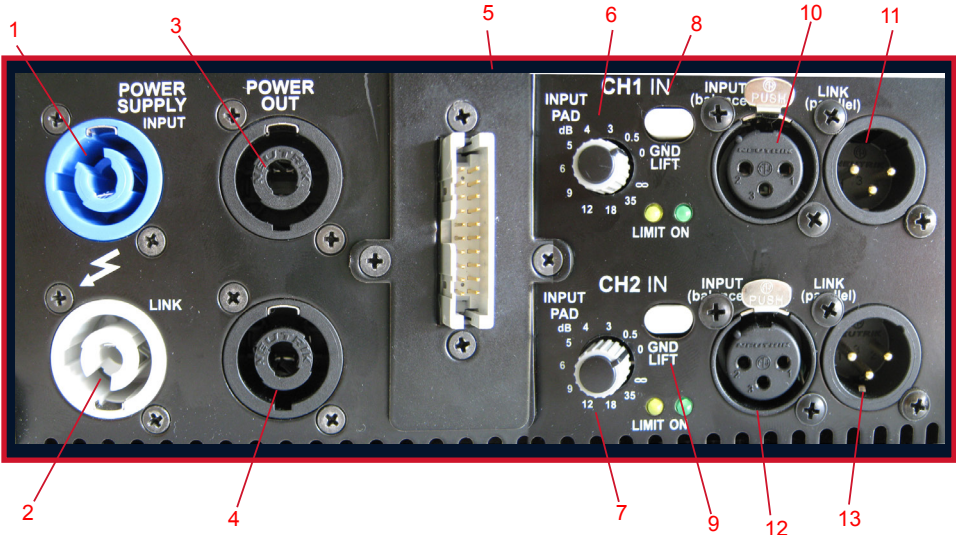
10.FRONT PANEL

- 1. Protection indicator
- 2. Indicator of proper operating
- 3. Indicator of signal/clip CH1 IN
- 4. Indicator of signal/clip CH2 IN
- 5. Preset in use
- 6. Preset selector,
 - press one to change,
 - 10 sec. to store
- 7. Power switch

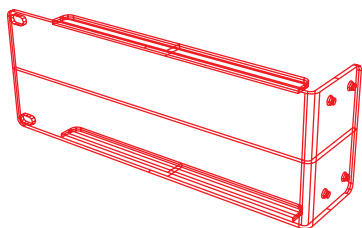


11.REAR PANEL

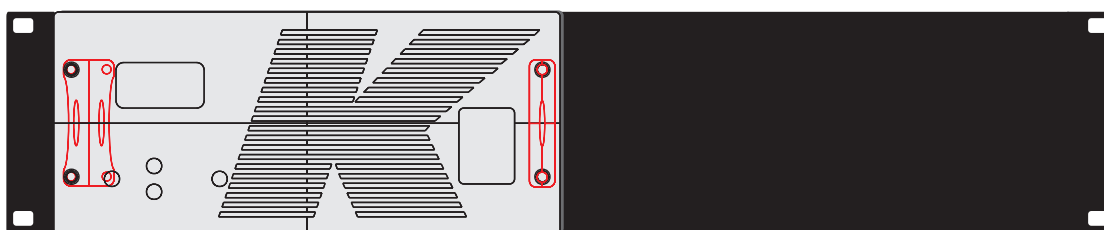
- 1. Powercon IN
- 2. Powercin OUT (max 15A)
- 3. Speakon1 OUT (CH1, CH2)
- 4. Speakon1 OUT (CH3, CH4)
- 5. DSP remote programmer connector
- 6. Input 1 level PAD
- 7. Input 2 level PAD
- 8. Input 1 ground lift switch
- 9. Input 2 ground lift switch
- 10., 11. Input 1 XLR balanced parallel connectors
- 12., 13. Input 2 XLR balanced parallel connectors



12.RACK ADAPTERS

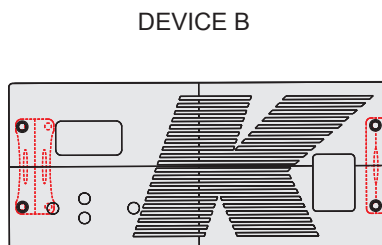
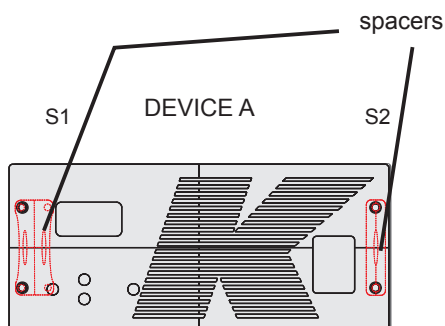


SINGLE RACK



Fix by the supplied screws the two rack adapters as shown in the drawing.

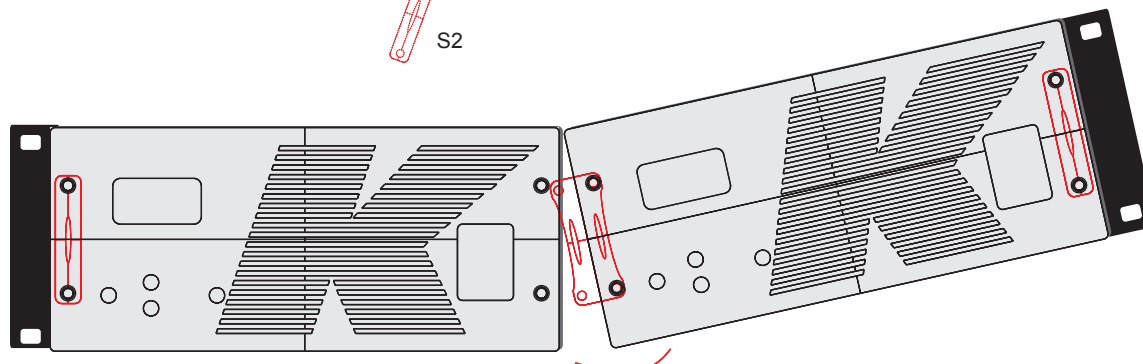
DOUBLE RACK



Unscrew the 4 anchor points of the front panels and remove it.



Remove the smaller steel spacer (S2) from DEVICE A and traslate S1 on DE-VICE B like in the draw beside. Then refit the front panels fixing all the 4 screws on DEVICE B and just the two ones through S1 on the DEVICE A .



Plug the two devices together by the last two screws and fix the rack adapters.



13.SERVICE

To obtain service:

- 1) Contact the official K-array distributor in your country. They will direct you to the service centre.
- 2) If you are calling for service, have the serial number(s) of the unit(s) at hand for reference. Ask for Customer Service, and be prepared to describe the problem clearly and completely.
- 3) If the problem cannot be resolved over the phone, you must return the unit for service.
- 4) You will be given an RA (Return Authorization) number for job tracking. Refer to this number on shipping materials and in all correspondence concerning the repair. Shipping charges are the responsibility of the purchaser.

Any attempt to modify or replace components of the device will invalidate your warranty. Service must be performed by an authorized K-array service center.



Cleaning:

- Clean the product enclosures using a soft, dry cloth only.
- Do not use any solvents, chemicals, or cleaning solutions containing alcohol, ammonia, or abrasives.
- Do not use any sprays near the product or allow liquids to spill into any openings.

	KA7	KA7-7
	Output power	
Max power 4Ω	2 x 350 w ^(EIAJ)	4 x 350 w ^(EIAJ)
Max power 8Ω	2 x 190 w ^(EIAJ)	4 x 190 w ^(EIAJ)
Max power - bridged 4Ω	1000 w ^(EIAJ)	
Max power - bridged 8Ω	700 w ^(EIAJ)	
Connectors	2 x 4-pin Speakon	2 x 4-pin Speakon
Speakon 1 wiring	pin 1+,1- = CH1 pin 2+, 2- = CH2	pin 1+,1- = CH1 pin 2+, 2- = CH3
Speakon 2 wiring	pin 1+,1- = CH2 pin 2+, 2- = N.C.	pin 1+,1- = CH2 pin 2+, 2- = CH4
	Audio specs	
Slew rate 8Ω	30V/μS	30V/μS
S/N Ratio	>113 dB/A	>113 dB/A
Distorsion (THD, DIM, SMPTE)	<0.005%	<0.005%
Input impedance	20K bal. 10K unbal.	20K bal. 10K unbal.
Gain	32 dB	32 dB
Output	Unbalanced to ground	Unbalanced to ground
Bandwidth	3 Hz - 45 KHz	3 Hz - 45 KHz
Damping factor 8Ω (100 Hz)	>1000	>1000
	Protection	
Thermal protection	Yes	Yes
Short circuit / over-load	Yes	Yes
Clip limit, Analog signal limit	Yes	Yes
	Audio Input	
Connectors	2 x Male + 2 x Female 3-pin bal .XLR	2 x Male + 2 x Female 3-pin bal .XLR
Wiring	Pin1 = Ground / Pin2 = hot (+) / Pin3 = cold (-)	Pin1 = Ground / Pin2 = hot (+) / Pin3 = cold (-)
	Remote control Input	
Connectors	RJ45 / USB	RJ45 / USB
	Remote control	
Protocol	RS485 / USB	RS485 / USB
	Power Input	
Connectors	2 x PowerCon IN/OUT	2 x PowerCon IN/OUT
	AC power	
Operating range	90 - 260 Vac 50-60Hz with PFC (auto range)	90 - 260 Vac 50-60Hz with PFC (auto range)
P. nom	140 VA	140 VA
Max input voltage	265 Vac	265 Vac
Power factory (1/2 max out/ 8Ω)	0.97	0.97
Minimum operation voltage	70 Vac	70 Vac
	Physical	
Dimensions	20 (1/2 U rack) x 8.8 (2U rack) x 27 cm (7.87"x 3.46"x 10.63")	20 (1/2 U rack) x 8.8 (2U rack) x 27 cm (7.87"x 3.46"x 10.63")
Weight	2.6 Kg (5.73 lbs)	5.5 Kg (12.13 lbs)
	<i>Notes for data</i> New materials and design are introduced into existing products without previous notice. Present systems may differ in some respects from those presented in this brochure	



15.PRESETS LIST

	<i>KA7</i>	<i>KA7-7</i>
Preset 1	KZ10	KZ10+KKS50
Preset 2	KV50	KV50+KKS50
Preset 3	KT20	KJ50vb narrow
Preset 4	KKS50	KJ50vb wide



APPROVAL



K-array declares that this device is in compliance with the applicable CE standards and regulations.

Before putting the device into operation, please observe the respective country-specific regulations!

WEEE



Please dispose of this product at the end of its operational lifetime by bringing it to your local collection point or recycling centre for such equipment.

The contents of this manual are furnished for informational purpose only. Hp Sound Equipment s.r.l. assumes no responsibility for any errors or inaccuracies that may appear in this manual.

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