

## KONAM



## OWNER'S MANUAL

## Front Panel-2CH



## 1. Mounting holes <br> To fix it on the rack case

2. Main power switch

Power on/off

## 3. Exit for hot air flow

This air flow comes from the front and goes through the rear fans and exit
4. CH 1 volume control knob

Working at BRG mode, it can control CH2 volume

## 5. CH 1 protection/clip indicator

Protection: Keep red and no output, Clip: Red and flash and have output
6. LCD display

To check few statust, such as temperature, working mode...etc
7. CH 2 protection/clip indicator

Protection: Keep red and no output, Clip: Red and flash and have output
8. CH 2 volume control knob

When working at BRG mode, it is not available
9. CH 1 signal status lights
10. CH 2 signal status lights

## Rear Panel-2CH



1. CH 1 input link

To link another amplifier
2. $\mathrm{CH} 1 \& \mathrm{CH} 2$ working mode switch STE: Stereo, PAR: Parallel, BRG: Bridge
3. $\mathrm{CH} 1 \& \mathrm{CH} 2$ sensitivity switch 35dB(amplify 57 times), 38 dB (amplify 80 times), 41 dB (amplify 112 times)
4. CH 2 input link

To link another amplifier
5. CH1 output

Used by a standard SPEAKON connector
6. CH 2 output

Used by a standard SPEAKON connector
7. Main power supply cord

AC $90-260 \mathrm{~V} \sim 50 / 60 \mathrm{~Hz}$
8. CH 1 input

Used by a standard XLR connector
9. CH 2 input

Used by a standard XLR connector
10. Hot air exhaust

The cold air intakes the amplifier from the front, cooling the internal heatsinks and exits by the fans

## Front Panel - 4CH



1. Mounting holes

To fix it on the rack case
2. Main power switch

Power on/off
3. Exit for hot air flow

This air flow comes from the front and goes through the rear fans and exit
4. CH 1 protection/clip indicator

Protection: Keep red and no output, Clip: Red and flash and have output
5. CH1 volume control knob

Working at BRG mode, it can control CH 2 volume
6. CH 2 protection/clip indicator

Protection: Keep red and no output, Clip: Red and flash and have output

## 7. LCD display

To check few statust, such as temperature, working mode...etc
8. CH 3 protection/clip indicator

Protection: Keep red and no output, Clip: Red and flash and have output
9. CH 3 volume control knob

Working at BRG mode, it can control CH 4 volume
10. CH 4 protection/clip indicator

Protection: Keep red and no output, Clip: Red and flash and have output
11. CH 3 volume control knob
12. CH1, 2, 3, 4 signal status lights
13. CH 4 volume control knob

Rear Panel - 4CH


1. $\mathrm{CH} 1 \& \mathrm{CH} 2$ working mode switch STE: Stereo, PAR: Parallel, BRG: Bridge
2. $\mathrm{CH} 3 \& \mathrm{CH} 4$ working mode switch STE: Stereo, PAR: Parallel, BRG: Bridge
3. $\mathrm{CH} 1 \& \mathrm{CH} 2$ sensitivity switch 35dB(amplify 57 times), 38dB(amplify 80 times), 41 dB (amplify 112 times)
4. CH3\&CH4 sensitivity switch 35dB(amplify 57 times), 38dB(amplify 80 times), 41 dB (amplify 112 times)
5. CH1 output Used by a standard SPEAKON connector
6. CH2 output

Used by a standard SPEAKON connector
7. CH 3 output

Used by a standard SPEAKON connector
8. CH4 output

Used by a standard SPEAKON connector
9. Main power supply cord AC $90-260 \mathrm{~V} \sim 50 / 60 \mathrm{~Hz}$

## 10. CH 1 input

Used by a standard XLR connector

## 12. CH 3 input

Used by a standard XLR connector

## 11. CH 2 input

Used by a standard XLR connector

## 13. CH 4 input

Used by a standard XLR connector

## 14. Hot air exhaust

The cold air intakes the amplifier from the front, cooling the internal heatsinks and exits by the fans

| Model | KPA-Q09 | KPA-D13 | KPA-Q13 | KPA-D18 | KPA-D28 | KPA-Q18 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Name | Digital Power Amplifier |  |  | Digital Power Amplifier |  |  |
| DSP Type | $/$ | 1 | / | / | 1 | $/$ |
| 8 ohms stereo | $4 \times 900 \mathrm{~W}$ | $2 \times 1300 \mathrm{~W}$ | $4 \times 1300 \mathrm{~W}$ | $2 \times 1800 \mathrm{~W}$ | $2 \times 2800 \mathrm{~W}$ | $4 \times 1800 \mathrm{~W}$ |
| 4 ohms stereo | $4 \times 1700 \mathrm{~W}$ | $2 \times 2200 \mathrm{~W}$ | $4 \times 2300 \mathrm{~W}$ | $2 \times 3200 \mathrm{~W}$ | $2 \times 5000 \mathrm{~W}$ | $4 \times 3200 \mathrm{~W}$ |
| 2 ohms stereo | $4 \times 2200 \mathrm{~W}$ | $2 \times 3100 \mathrm{~W}$ | $4 \times 2600 \mathrm{~W}$ | $2 \times 4200 \mathrm{~W}$ | $2 \times 6000 \mathrm{~W}$ | $4 \times 4200 \mathrm{~W}$ |
| 8 ohms bridged | $2 \times 3400 \mathrm{~W}$ | 4400w | $2 \times 4400 \mathrm{~W}$ | 6400w | 10000W | $2 \times 6400 \mathrm{~W}$ |
| 4 ohms bridged | 2×4400w | 6200w | $2 \times 5200 \mathrm{~W}$ | 8400w | 12000W | 2×8400W |
| Output Circuitry | Class D | Class D | Class D | Class D | Class D | Class D |
| Frequency Response | $20 \mathrm{~Hz}-20 \mathrm{KHz}( \pm 0.5 \mathrm{~dB})$ |  |  | $20 \mathrm{~Hz}-20 \mathrm{KHz}( \pm 0.5 \mathrm{~dB})$ |  |  |
| THD\%: 1/8 RMS, 1KHZ | $\leq 0.05 \%$ | $\leq 0.05 \%$ | $\leq 0.05 \%$ | $\leq 0.05 \%$ | $\leq 0.05 \%$ | $\leq 0.05 \%$ |
| Slew Rate(RMS,1KHZ) | >50V/ $\mu \mathrm{s}$ | >50V/ $\mu \mathrm{s}$ | >50V/ $\mu \mathrm{s}$ | >50V/ $\mu \mathrm{s}$ | >50V/ s | >50V/ $\mu \mathrm{s}$ |
| Damping Factor(RMS,1KHZ) | $\geq 5000$ | $\geq 5000$ | $\geq 5000$ | $\geq 5000$ | $\geq 5000$ | $\geq 5000$ |
| Dynamic: $1 / 8 \mathrm{RMS}$, 1 KHZ | -70dB | -70dB | -70dB | -70dB | -70dB | -70dB |
| Input Impedance | $10 \mathrm{~K} / 20 \mathrm{~K}$ Ohms, unbalanced or balanced |  |  | 10K/20K Ohms, unbalanced or balanced |  |  |
| S/N Ratio(A-weighted, RMS) | $>105 \mathrm{~dB}$ | $>105 \mathrm{~dB}$ | $>105 \mathrm{~dB}$ | $>105 \mathrm{~dB}$ | $>105 \mathrm{~dB}$ | $>105 \mathrm{~dB}$ |
| Power Supply | AC $90-260 \mathrm{~V} \sim 50 / 60 \mathrm{~Hz}$ |  |  | AC 90-260V $\sim 50 / 60 \mathrm{~Hz}$ |  |  |
| Input Sensitivity | $35 \mathrm{~dB} / 38 \mathrm{~dB} / 41 \mathrm{~dB}$ |  |  | 35dB / 38dB / 41dB |  |  |
| A-Guard Protection System | Short circuit protection, DC protection, Undervoltage protection, Smart overheat management, Soft startup protection, Output limiter/overload protection, Limited current circuit |  |  |  |  |  |
| Cooling | Continuously variable speed fans, Back to front venting, mandatory cooling |  |  |  |  |  |
| Input/Output Connector | XLR + Speakon |  |  | XLR + Speakon |  |  |
| Rack Space | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Dimension(W*H*D mm) | 483*44.5*402 |  |  | 483*44.5*477 |  |  |
| Packing Dimension (mm) | 570*610*110 | 570*610*110 | 570*610*110 | 570*610*110 | 570*610*110 | 570*610*110 |
| Net Weight | 10.8 kg | 10.8 kg | 10.8 kg | 10.8 kg | 11 kg | 11 kg |

*Testing standard: EIA, 1 KHz sine wave, $40 \mathrm{~ms}, 220 \mathrm{~V}$.

* Features and Specifications are subject to change without prior notice.


## Safety Information



CAUTION: To reduce the risk of electric shock, do not remove any cover(or the rear section). No user serviceable parts inside. Refer serviring to qualified service personnel only.

WARNING: To reduce of fire or electric shock, do not expose this appliance to rain and moisture. Electrical equipments should NEVER be kept or stored in damp environments.


This symbol, wherever appears, is intended to alert the user to the presence of un-insulated dangerous voltage within the appliance is enclosure that may be of sufficient magnitude to a risk of electric shock.


This symbol, wherever appears, is intended to alert the user to the presence of important operating and maintenance(servicing)instruction in the literature accompanying this appliance.

This symbol means: indoor use only.

This symbol means: Read instructions.

## Safety Informations

1. Read Instructions $\rightarrow$ All the safety and operating instructions should be read before this products is connected and used.
2. Read Instructions $\rightarrow$ The safety and operating instructions should be kept for future reference.
3. Heed Waning $\rightarrow$ All warnings on this appliance and in these operating instructions should be followed.
4. Follow Instruction $\rightarrow$ All operating and other instructions should be followed.
5. Heat, Water and Moisture $\rightarrow$ Do not place this appliance to close to any high heat sources such as radiators. Also this appliance should be kept away form direct contact with liquids.
6. Ventilation $\rightarrow$ The appliance should be situated so that it is location or position does not interfere with it is proper ventilation. For example, the appliance should not be situated on a sofa, bed, or similar surface that may block the ventilation opening; or keep the appliance away of those objects such as newspapers, carpet which may cover the ventilation opening or impede the flow of air through the ventilation opening.
7. Power Source \& Power Cord $\rightarrow$ This appliance should be connected to a power supply only pf the type described in these operating instructions, or marked on the unit. Be sure connect the appliance to a mains power socket which with a protective grounding connection. Power supply cord should be routed so that the are not likely to be walked upon or pinched by the items placed on or against them. When removing the cord from a power outlet be sure to remove it by holding the plug attachment and not by pulling on The cord. Check the total maximum power of your AC wall outlet and make sure it has the enough power to match the Power Consumption of this appliance, otherwise you could overload the wall outlet, which could cause fire.
8. Internal/External Voltage Selectors $\rightarrow$ Internal of external voltage selector switches, if any,should only be reset and re-equipped with a proper plug for alternative voltage by a qualified service technician. Do not attempt to alter this yourself.
9. Object \& Liquid Entry $\rightarrow$ Take care to avoid any objects falling into or liquids are not spilled in to the inside of the appliance.
10. Cleaning $\rightarrow$ Unplug the appliance first and clean only with a dry cloth.
11. Non-use Period $\rightarrow$ The power cord of the appliance should be unplugged from the outlet when left unused for long periods of tine.
12. Unpacking \& Setup $\rightarrow$ Please check your appliance for any damage after unpacking (before connecting)and contact your dealer in case of any related complains. Take care of choosing your installation place and the correct AC connection. If built in to a case, be aware that the depth and the weight of some kind appliance(such as Amplifier)does require an additional fixing on the backside or the use of rack shelf supports. Never mount the amplifier in a rack just by fixing it on the front plate-Manufactrer takes no responsibility in this case.
13. Damage Requiring Service $\rightarrow$ Servicing is required when the appliance has been damaged in any way, such as power cord or plug is damaged, liquid has been spilled or objects have fallen in the appliance, the appliance has been exposed to rain or moisture, dose not operate normally, or has Been dropped. Refer all servicing to qualified service personnel or contact your dealer. Do not attempt to repair by yourself.

## PROFESSIONAL POWER AMPLIFIER

KPA
SERIES

