

# PROFESSIONAL

**POWER AMPLIFIER**

KS 3.3V

voice  
**BIG**  
DESIGN BY GERMANY

## KS SERIES



## OPERATION INSTRUCTIONS

## SYMBOLIZATION:

1. When an arrow appears in the triangle sign, there is a alarm of dangerous Voltage or possible dangerous Voltages.
2. When an exclamatory appears in the triangle sign, the users must fulfill the manual instruction for safety during the operation (critical change).

### ADVICE

To Avoid electric shock, don't open the cover whenever please refer it to the qualified technicians for the maintenance if the parts inside need adjustment or replacement.

### WARNING:

Don't expose the We suggest the users apparatus to moisture or humid ways if the machine environment to avoid interfere radio shock occurrence.

### NOTES:

- We suggest the users adopt the following ways if the machine interfere radio receiver possibly:
1. adding peripheral equipments such as antenna for location or direction.
  2. enlarger the distance among the apparatus.
  3. using different power supply phase outlet.
  4. Refer service to the authority dealer or qualified technicians.

## CAUTION:

1. Be carefully read this manual before the application
2. Keeping this manual and Package properly for the future usage.
3. Be careful the relayed wiring in the machine.
4. Strictly operate the operation by the way of this manual for prevent it dangerous or electric shock.
5. Don't close to the heatsink and prevent heavy or objects bumping the machine and avoiding the drop down.
6. No user's parts serviceable inside machine.

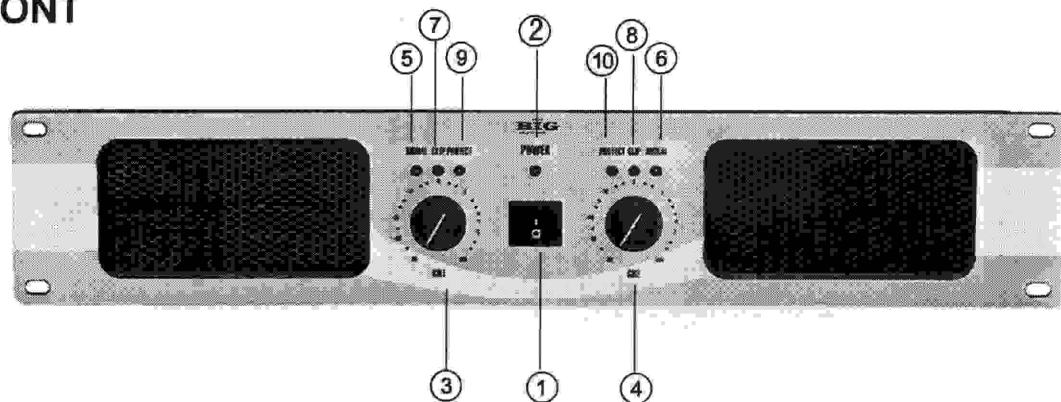
## SUMMARY:

professional audio amplifier consists of 2U and 3U series. The series is the type of linear (analogue) power supply and the series is the super switching power supply. Both them are designed by High efficiency and high reliability circuits classified as H types. They has the excellent characteristics of large intelligent compressor frequency response Band filter and hearing modification.

2U series includes the types: 450, 650, 900, 1200

3U series includes the types: 800, 830, 850, 870, 890

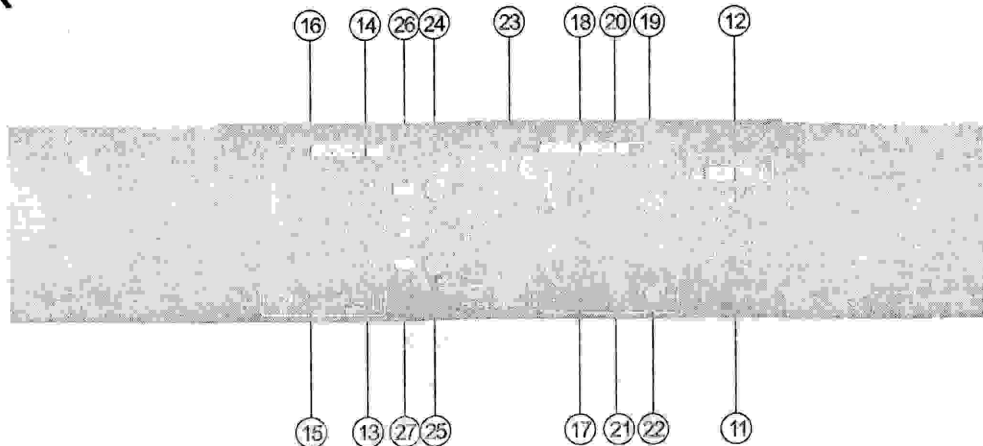
# FRONT



1. Power Switch
2. Power light
3. Channel 1 gain (see output operation)
4. Channel 2 gain (see output operation)
5. Channel 1 Signal light (see light indication)

6. Channel 2 signal light (see light indication)
7. Channel 1 clip light (see light indication)
8. Channel 2 clip light (see light indication)
9. Channel 1 protection light (see light indication)
10. Channel 2 protection light (see light in dication)

# BACK



11. AC power cord

12. Fuse (see fuse socket)

13. Channel 1 combo inputs (see connections)

14. Channel 2 combo inputs (see connections)

15. Channel 1 cannon input (see connections)

16. Channel 2 cannon input (see connections)

17. Channel 1 speak on output (see connections)

18. Channel 2 speak on output (see connections)

19. Channel 1 Negative post (see connections)

20. Channel 1 Positive Post (see connections)

21. Channel 2 Positive Post (see connections)

22. Channel 2 negative Post (see connections)

23. Operation Switch (see operation option)

24. Channel 1 Filter Switch

25. Channel 2 Filter Switch

26. Channel 1 bass Switch

27. Channel 2 bass Switch

<b>Model</b>	<b>KS-16V</b>	<b>KS-18V</b>	<b>KS-22V</b>	<b>KS-33V</b>
Rated Power Output(4 $\Omega$ )	2X400W	2X600W	2X1000W	2X1500W
Bridged Output(8 $\Omega$ )	800W	1200W	2000W	3000W
Frequency response	20-20kHz	20-20kHz	20-20kHz	20-20kHz
Total Harmonic Distortion	<0.01%	<0.01%	<0.01%	<0.01%
Input impedance	20K $\Omega$	20K $\Omega$	20K $\Omega$	20K $\Omega$
Input sensitivity (d Bm)	0dB	0dB	0dB	0dB
Max input Gain	+20dB	+20dB	+20dB	+20dB
S/N(dB)	$\geq$ 95dB	$\geq$ 95dB	$\geq$ 95dB	$\geq$ 95dB
G W (kg)	15	16	24	26.7
Dimensions (W + H + D)mm	480X450X90	480X450X90	480X450X90	480X450X90

## CR TECHNICAL PROPERTIES

All the This series amplifier adopt the H type circuit Which is of high efficient More Stability low heat dispersion, stronger drive capacity. The intelligent compress limiter eliminate the output distortion throughout The Band filter technology Provide the excellent frequency response commensurate humane management in addition to the Product. take a sound modifying technology exceptionally this series series apply the technology of super switch power supply the new technology application makes it fast transit. the voltage surges. Stead, good. transient response and light - weight ever all.

## SMART COMPRESS LIMITER

This series amplify has an independent compress limiter system in every channel, This system can function to ensure the reduction of output distortion Caused by overload. The limiter is free and automatically adjusted. You may assure the system rest.

## LOW INDEPED ANCE APPLICATION

The This series Series can Work at low loadimpe dance (single channel  $4\ \Omega$  or less than) and can match the low impedance till minimum  $2\ \Omega$  You can connect the outputs With multiple cabinets. Which are combined into  $4\ \Omega$  or  $8\ \Omega$  loads Be sure of the phase correction for speaker connection. No converse Phase! The Speakers from different Brands must be measured before connecting or faultphase would abate all the system Performance. Especially low frequency response.

## BAND FIL TER

There is independent filter (40Hz-300Hz) system with the technology of single frequency dB revising.

## HEARING STIMULATING

This system is designed to each channel, It generates Some ever harmonic wave to satisfy audience taste While amplifying the signals. The S/N Specifications is not affected as applying the system on or Product

## PARALLEL MODE

You need to add a signal allocation when inputing many amps by a group of signals because of different input impedance. It would be a discount performance if paralleling thg terminals.

## BRIDGE MONO

All This series has the Bridge model connect function. It Sums Power of both channel to output tue load as a Single channel. eventually raise the power outputs. By this way. Amps accept inputsignal by channel A, allgain (volume) is controlled by channel A Gain just filp the Switch to the BRIDGED Position on the rear Panel and load s Positive lind the channel A s positive output Post the load S Positive lind the channel B s Positive output Post This series Support low ( $4\ \Omega$ ) Bridge mono Be assure the speaker rated Power before Setting tng the Bridge mode.

## POWER OPZRATION

The gains Set to infinity position before turn Power on The amp enters the soft- start stat as switch on system represents a delay - must state. Whilst the indicators light on both channels. Then it works several Seconds later and lights off on both channels but continuing on for working (onling) indicators Avoiding Switch operation frequently.

## VENTILATION

It must be a sufficient cool air amounts for cycle ventilation, be carefully avoiding some hot or corrosive gas generated by another equipments into amps. This series's fans blow from front to rear panel, unblock the air tunnels.

## LEVEL OPERATION

You can control the gain knob each channel as required for output considering the speaker rating power while raise the gains This series has two independent gains for controlling clockwise increasing and counter wise decreasing, don't force it suddenly to avoid faulty parts assuring make no red light as possible as it could withstand.

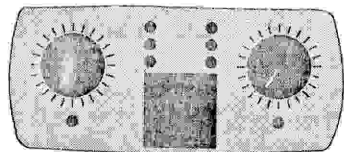
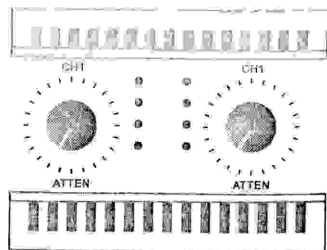
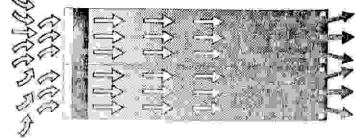
## FUSE SOCKET

Please refer to the unit back panel diagram, play attention to operating the machine for unplug from socket at the first step, please find fuse parameter in the attachment for replacement.

## OPERATION MODE

Both channel drive (STEREO), or bridge mono drive see rear panel switch instruction.





## CHART FOR SYSTEM

This series has two input interface, XLR, 1/4 TRS, Bal:40K $\Omega$  unbal:250K $\Omega$ , We recommend you use XLR input to reduce AC harmonic AC interference as the input cords are longer. This series has also two output interface, posts and speaker. It has better take quality and shorter cords for connecting to achieve less power consumption and high damping factor. This series operation instruction appears on the back panel.

## INPUT CONNECTING

The  $\phi$  6.35 input plug can be directly to input port. The XLR input balance connecting: P1 shield, P2 Positive, P3 Negative. In conditions of short route transmission, or less interference, non-Balance connecting might be considered for input signal P2 Positive, P1 P3 negative and shield.

## COMBINE THE INPUT SIGNAL EMERGENCY

We suggest a signal allocation as a group of input signals you could choose multiple input Socket as input port and XLR as output in the emergent event, To achieve optimum performance Gains must be adjusted properly as the different impedance of each one. This series has a self lock with input port, you must press lock button to pull out plug for disconnecting.

## OUTPUT TERMINALS

You need to connect 1 + to speaker s positive post 1- to negative post in terms of speak socket, clockwise the plug as inserting the socket for locking it to ensure the amps connect the speaker correctly and tightly. Counter clockwise will unlock the plug to disconnect. You may connect amps through posts to speakers. Make sure the polarity correct to avoid false performance.

## TROUBLE SHOOTING

No sound, No power indicator— check the power connection and fuse socket, In addition to using another socket to verify the previous condition such as turn of faulty. No sound. No signal indicator— check input connection or original signal, it likely occurs when the gain sets infinite position. No sound, Signal lights— check output connection or speaker No sound. Protecting lights— In protection state, follow the steps to exclude the faulty possible, reinstate would be automatically. No channel separation—check the bridge mono switch and set it to stereo position assure the other equipment connect are add in stereo states. Noise or hum—check the plug and sockets, cord abrasion good in contact with connector, be carefully treated equipments such as power silicon controller, radiator apparatus etc.

1. Distortion—check input signal altitude, and output states including speaker system.
2. Failure start —Turn off power for a few minutes, then starting power. The reason is caused by high speed switch on/off frequency, in addition to paying attention on power plugs or supply lines. Unbalance volume—check gains knobs, input signals and bridge model switch. Contact authorized dealer or the nearest service units.

