



EMPERTECH™

DIGITAL CONTROL PUBLIC ADDRESS SYSTEM
Installation & Operation Manual

MIXER AMPLIFIER

KB-C30P
KB-C60P

■ Easy Installation ■ Easy Info Reading ■ Easy Access & Control ■ Easy Maintenance

WARNING

1. Read these instructions - All the safety and operating instructions should be read before this product is operated.
2. Retain these instructions - The safety and operating instructions should be retained for future reference.
3. Heed all warnings - All warnings on the appliance and in the operating instructions should be adhered to.
4. Follow all instructions - All operating and use instructions should be followed.
5. Do not use this apparatus near water - The appliance should not be used near water or moisture - for example, in a wet basement or near a swimming pool, and the like.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacture's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding plug. A polarized plug has two blades with one wider than the other. A grounding plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at the plugs, convenience receptacles, and at the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart or rack is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug the apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified personnel. Servicing is required when



the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

15. Please keep the unit in a good ventilation environment.
16. **WARNING:** To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall not be placed on apparatus.
17. **WARNING:** The mains plug or appliance inlet is used as disconnect device, the disconnect device shall remain readily operable.
18. **Power Sources** – This product should be operated only from the type of power source indicated on the rating label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer the operating instructions.
19. **Safety Check** – Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.
20. Don't touch conductive parts of output terminals to prevent hazardous electrical shock. The external wiring connected to the terminals requires installation by an instructed person or the used of ready-made leads or cords.
21. This equipment is for commercial & professional use only.
22. This product is in compliance with EU WEEE regulations. Disposal of end of life product should not be treated as municipal waste. Please refer to your local regulations for instructions on proper disposal of this product.
23. To prevent hazardous electrical shock, do not touch the conductive parts of the output terminals. The external wiring connected to the terminals requires installation by an qualified technician or the use of ready made leads or cords.
24. Please locate the apparatus at places nearby power socket for quick power disconnection in emergency.



Protective earthing terminal. The apparatus should be connected to a mains socket outlet with a protective earthing connection.



This lightning flash is intended to alert the user to the presence of non-insulated "dangerous voltage" on the output terminals that may be of sufficient magnitude to constitute a risk of electric shock. The external wiring connected to the terminals requires installation by an instructed person or the used of ready-made leads or cords.



CAUTION

**RISK OF ELECTRIC SHOCK
DO NOT OPEN**



CAUTION: To reduce the risk of electric shock, do not remove any cover. No user-serviceable parts inside. Refer servicing to qualified service personnel only.



The lightning flash with arrowhead symbol within the equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.



The exclamation point within the equilateral triangle is intended to alert the user to the presence of important operation and maintenance (servicing) instructions in the literature accompanying this appliance.

CAUTION: To prevent electric shock, do not use this polarized plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.

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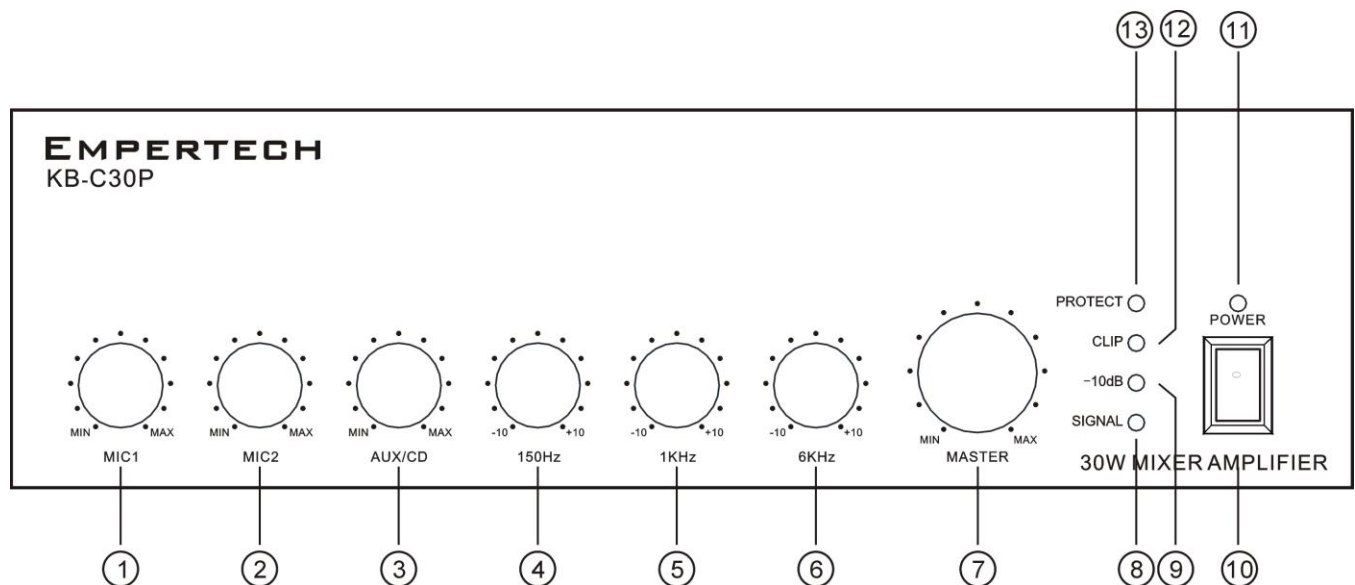
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Features

- 30W/60W Mixer amplifier
- 2 microphone inputs; gain control for MIC 1, level adjustable from microphone to aux input
- One Aux / CD input, switchable
- Independent volume control for all the inputs, and master volume control
- With 6KHz, 1kHz, and 150Hz tone control
- LED for output level and protection indication
- 4Ω 、 8Ω 、 16Ω 、 and 70V/100V speaker line output; 70 /100V choose 1 of these 2
- 3 level priority. MIC1 > MIC2 > AUX/CD; MIC1 is VOX mute, and MIC 2 is try contact mute

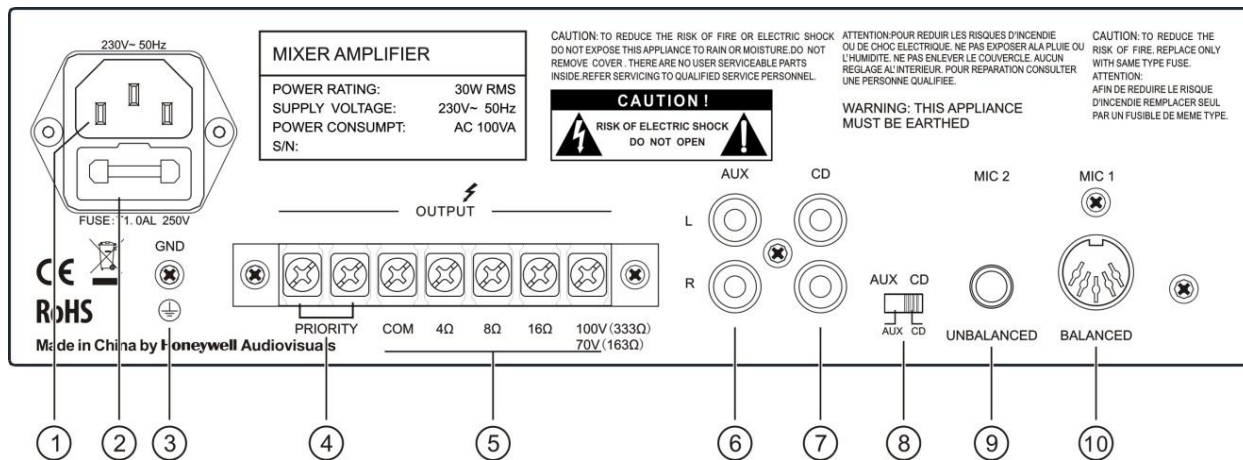
Functional components

Front Panel



1. MIC1 Volume
2. MIC2 Volume
3. AUX/CD Volume
4. Bass 150Hz
5. Middle 1KHz
6. Treble 6KHz
7. Master Volume
8. Signal LED
9. -10dB LED
10. Power Switch
11. Power LED
12. Clip LED
13. Protect LED

Rear Panel



1. Appliance inlet
2. Fuse used in inlet
3. Ground screw
4. Manual Priority terminals
5. Speakers output terminals
6. AUX Input
7. CD Input
8. AUX/CD Selector Switch
9. MIC2 Input-unbalanced
10. MIC1 Input-Balanced

Operation

Equalizer Controls

Three different controls for three frequency bands. Those volume controls will increase or decrease bass and treble or add some presence to the sound.

Manual Priority Terminals

These two terminals, when shorted, will mute incoming signal from AUX and CD inputs, thus giving priority to the Telephone Paging and Microphone. These are especially useful when a table microphone with switch is part of the installation.

Connectios

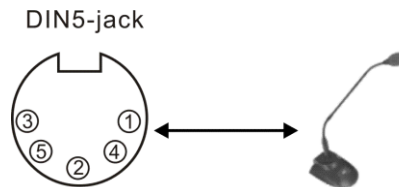
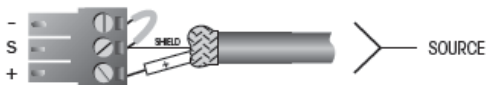
Microphone1

The microphone inputs use DIN-5 jack and are balanced. Priority operation can be obtained by using the din sockets.(see priority connection)

Balanced operation

- Pin 1 Signal +(live)
- Pin 2 Screen(GNG)
- Pin 3 Signal- (return)
- Pin 4 Priority terminals
- Pin 5 +18V Output +18V

UNBALANCED LINE

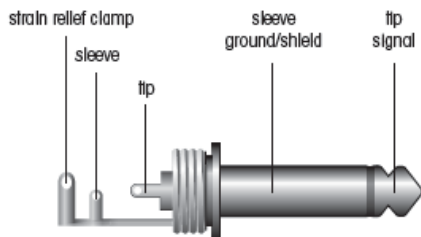


Microphone2

Mic2 input is a Unbalanced standard 1/4 " mono jack on the rear panel .

Wiring is as follows

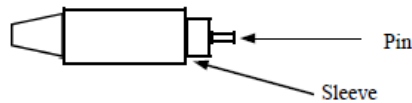
Unbalances 1/4" Connector



AUX/CD Connection

AUX/CD input is two phono sockets .These inputs are configured as AUX Or CD inputs

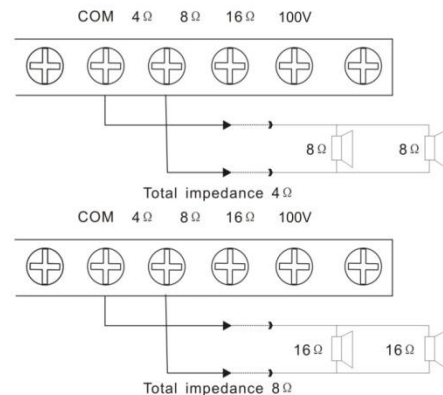
Pin.....Signal
Sleeve.....Screen



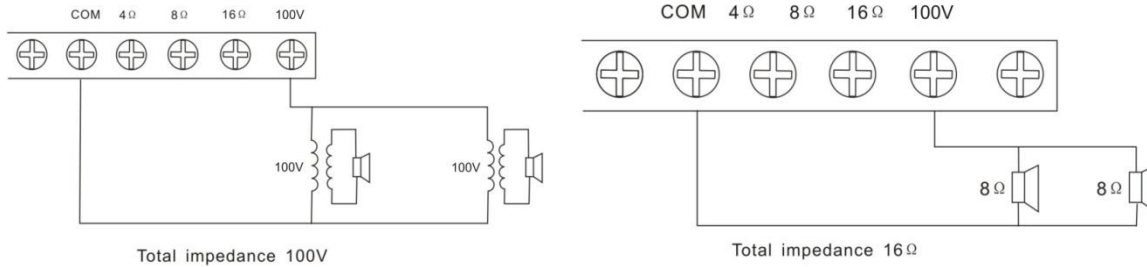
Speaker Output

These terminals are offering 3 low-z outputs 4Ω, 8Ω, 16Ω depending on your speaker combination. A 70V/100V Hi-z output is also available. Please note that one wire only should be connected to COM screw and one wire to the selected impedance or voltage. Multiple combinations cannot be done at the output level.

Four different types of connections are provided. The low impedance section: 4Ω, 8Ω, 16Ω is designed for a small amount of speakers to be connected to your amplifier. The 100V section is especially designed for a multiple speaker distribution. When using the 100V output, speakers have to be equipped with 100V transformer. The maximum amount of



speakers to be placed on your distribution line is in relation to the power allocated to each speaker. The total wattage set on the secondary side of the transformers on your speaker line must not exceed the maximum RMS output power: 30W or 60W. Failure to respect this may cause permanent damage to the amplifier.



MIC2 Input

This ¼ " jack is a two conductor unbalanced microphone input. If you wish to use a low impedance microphone on a balanced line with a long cable, we recommend that you use an AM-15 adaptor to do so. If you choose to use a Table Top microphone with an enunciator switch, keep in mind that the switch should be connected to the two priority terminals.

MIC1 Input

This special input (terminals 1 and 3) will allow you to page in your PA system using your own telephone set. Pin 2 is Ground and Pin 4 is for manual priority switching. Any signal going through Pin 3 with automatically triggers the priority system without any manual intervention. At the end of the announcement, the system will return to its normal operation. A Gain control is located next to the input in order to increase incoming volume if necessary. Final adjustment will be made with the Tel Paging volume control located on front panel.

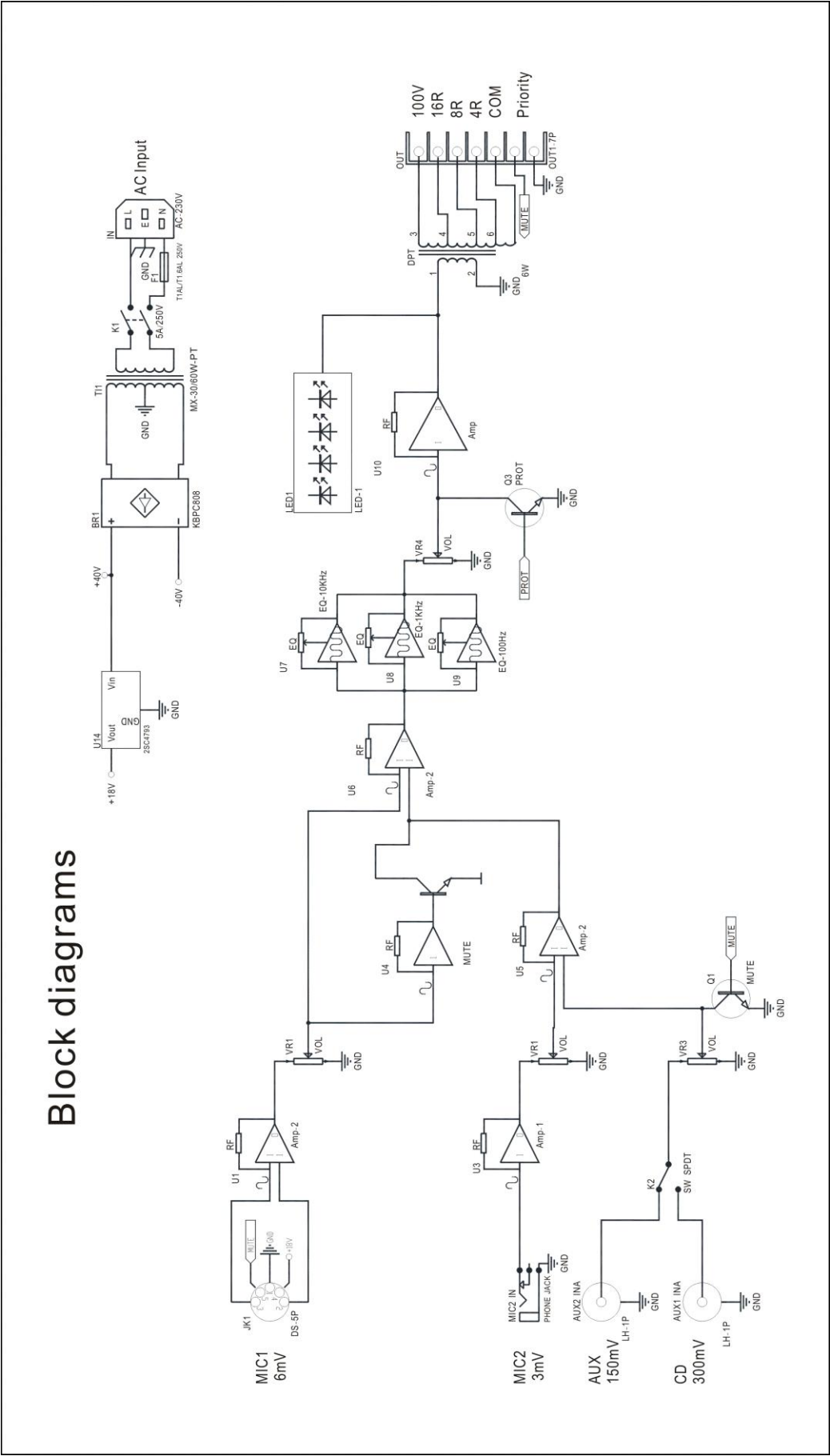
Recommendations

Keep your amplifier away from excessive humidity, dust or grease. This unit has sensitive components that can be affected in a difficult environment. If, at one point during its usage, the fuse on the AC line needs to be changed make sure that the replacement is of the same value. It is important that you try to identify the reason for this failure. This will most likely prevent further damage to your amplifier. Any service work on this unit should be performed by a qualified technician

Specifications

Parameter \ Model	KB-C30P	KB-C60P
Output Power	30W	60W
Fuse	T1.0AL 250V	T1.6AL 250V
THD at Rated Power	2.5%	
Speaker Outputs	4Ω, 8Ω, 16Ω, Hi-Z output (70V/100V choose 1 of these 2)	
Frequency Response	100 Hz – 20 kHz	
MIC2 Input	3 mV @ 600 Ω	
AUX Inputs	150 mV @ 50 KΩ	
CD Inputs	300 mV @ 50 KΩ	
MIC1 Input	6 mV @ 600 Ω	
Sig/Noise Ratio, Mic	>65 dB	
Sig/Noise Ratio, AUX/CD	>75 dB	
Tone Controls	±12 dB	
AC Power	~230V/50 Hz	
Dimensions	270(W) X 90(H) X 260(D) mm	
Weight	3.2kg	4.2kg
Gross Weight	4.3kg	5.6kg

Block Diagram



EMPERTECH™

Life Safety A/V (Guangzhou) Co.,Ltd

No. 257 Junye Road
Guangzhou GETDD East 510530, China

Phone: +86 20 2839 9600

Fax: +86 20 2839 8706

Website: www.empertech.com



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