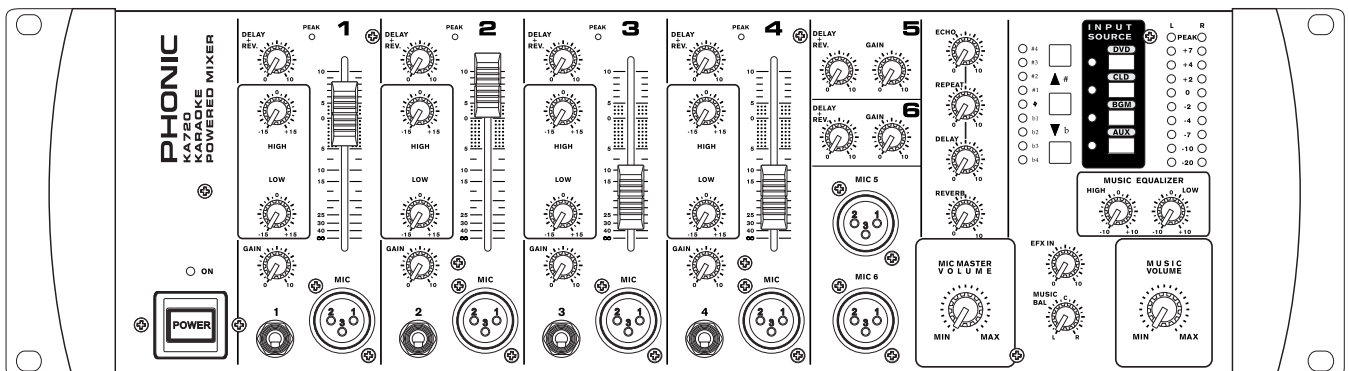


KA720

Karaoke Mixing Amplifier

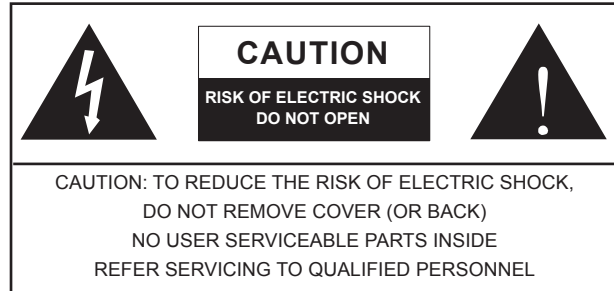


IMPORTANT SAFETY INSTRUCTIONS

The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus. The MAINS plug is used as the disconnect device, the disconnect device shall remain readily operable.

Warning: the user shall not place this apparatus in the confined area during the operation so that the mains switch can be easily accessible.

1. Read these instructions before operating this apparatus.
2. Keep these instructions for future reference.
3. Heed all warnings to ensure safe operation.
4. Follow all instructions provided in this document.
5. Do not use this apparatus near water or in locations where condensation may occur.
6. Clean only with dry cloth. Do not use aerosol or liquid cleaners. Unplug this apparatus before cleaning.
7. Do not block any of the ventilation openings. Install in accordance with the manufacturer'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-type plug. A polarized plug has two blades with one wider than the other. A grounding type 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 plug, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service 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, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



The lightning flash with arrowhead symbol, within an 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 to persons.



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

WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

CAUTION: Use of controls or adjustments or performance of procedures other than those specified may result in hazardous radiation exposure.



KA720

Karaoke Mixing Amplifier

USER'S MANUAL

TABLE OF CONTENTS

INTRODUCTION	4
FEATURES	4
BASIC SETUP	4
CONTROLS AND CONNECTIONS	5
APPLICATION.....	9
SPECIFICATION	10
BLOCK DIAGRAM.....	12

INTRODUCTION

Congratulations for purchasing the Phonic KA720 Karaoke Mixing Amplifier, another great innovation bound to provide you with hours of enjoyment at a time. The power provided to users by the KA720 surpasses that of the average Karaoke mixer, pumping 360 Watts of power to each channel.

Featuring a total of 6 microphone inputs, as well as 4 line inputs, the KA720 features a fully functional key adjustment and EQs for both vocals and music. Karaoke audio and video are input via the four included sets of RCA inputs, and send out via the two sets of RCA outputs.

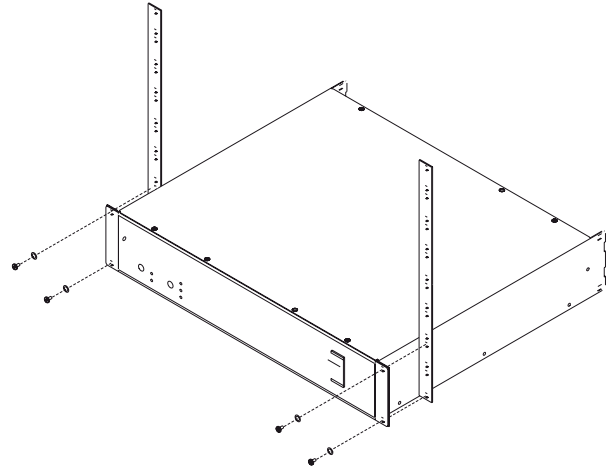
This user's manual should be read thoroughly and stored in an easy to find place for future reference. If you do, however, lose the manual, you can easily download another one by logging onto www.phonic.com.

FEATURES

- 2 x 360W / 4 ohms maximum power output
- Switching-mode power supplier for Clear, Powerful Amplification
- 24-Bit DSP Reverb and Professional Digital Echo for Superior Vocal Enhancement
- 9 Step Digital Key Controller Changes the Key of the Music without Changing the Tempo
- On Board Video Switching with 4 Sets of A/V Inputs, 2 Audio Outputs and 2 Video Output
- 6 Microphone Inputs
- One AUX output and one Stereo AUX input
- Individual Microphone Bass & Treble Controls
- Music Bass & Treble Controls
- Music Balance Control
- Master Microphone and Music Volume Controls

BASIC SETUP

The KA720 Karaoke Mixing Amplifier can be rack mounted, and will take up 3 standard rack units to do so. Your first step, provided you wish to mount the KA720 into a rack, should be to do so. Four screws, firmly in place on each corner of the unit, will do the trick.



After this, you may wish to connect your various input, and output, devices. The four different RCA input channels provide you with enough to room for a DVD player with karaoke function (or simply a DVD player, for use between karaoke sets), an actual karaoke machine, a PC computer (for users who opted to have the VGA inputs and outputs), or even a standard CD player (which will not feature video output, but can be used regardless). The Microphone inputs on the front of the KA720 are provided for the addition of, you guessed it, microphones. If condenser microphones are added to the KA720, be sure to activate the Phantom power.

Plugging the RCA audio and video outputs of the KA720 allows the audio and video to be sent to a television set or video projection device. Passive speakers can be connected to the main audio outputs and positioned for the best listening experience.

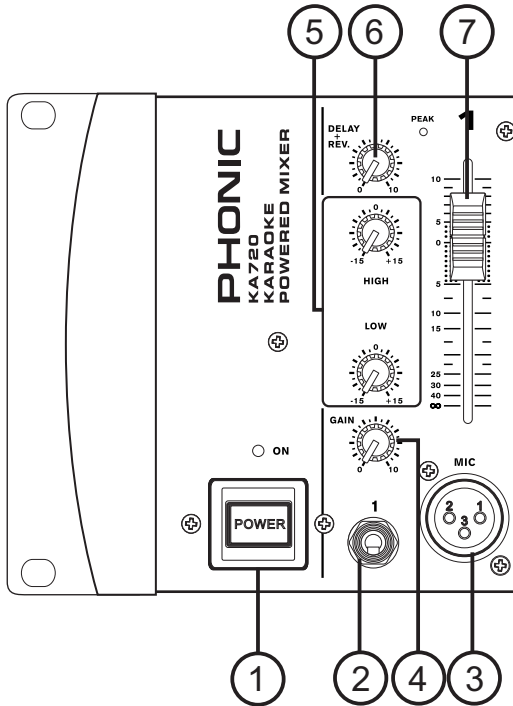
Use the provided AC power cord to connect the KA720 to an appropriate power source. Be sure to check the voltage selector is adjusted correctly before turning the unit on.

CONTROLS AND CONNECTIONS

Front Panel

1. Power Button

This button activates the KA720 Karaoke Mixer. When pushed in, the LED will light up and your unit will be functional.



Channel Strips

2. Line Input

This is a 1/4" TRS input, which accepts line-level devices for signals to be fed through to the KA720 Karaoke Mixing Console. This can be used for microphones that use 1/4" jacks, however can also extend to certain instruments or audio equipment.

3. Mic Input

This female XLR jack allows you to plug microphones into the mixer. Singers are then able to do their thing, the result of which will be sent to the main mix at a level determined by the channel's gain and level controls.

4. Gain Control

The gain control allows users to increase and decrease the level of the signal received through the Mic and line inputs. This can help boost the signal prior to it being adjusted by the channel controls.

5. 2-band EQ (Low and High Controls)

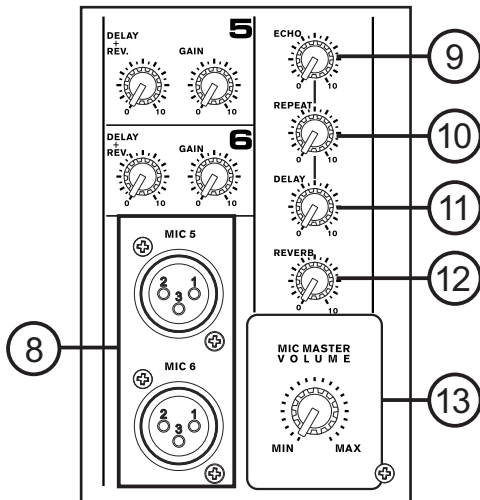
These controls give a shelving boost or cut of 15 dB to high frequency (12 kHz) and low frequency (80 Hz) sounds. Depending on the strengths of the vocalist, it may be desirable to cut middle frequency sounds a little bit, while boost high and low frequencies slightly.

6. Delay+Rev Control

This control adjusts the level of audio that is sent from the channel to the Echo Mixing Bus.

7. Level Control and Peak Indicator

This fader quite simply allows users to adjust the final output level of that particular channel, the signal of which is sent to the main mixing bus. The peak indicator will light up when the output signal of the channel reaches high peaks and should be lowered. For best results, the level control can be adjusted to a level that allows the peak indicator to flash infrequently.



8. Mic 5 & 6

These individual Microphone inputs are similar to input channels 1 through to 4, however do not feature 1/4" phone jacks, EQs or level controls. These channels do feature 'delay+rev' and gain controls, however, allowing users to adjust the audio level sent to the echo and main mixes, respectively.

Built-in Echo

9. Echo Control

This control adjusts the level of saturation added to the signal sent to the "echo" mix (the final level of which is adjusted by the 'delay+rev' controls on individual channels).

10. Repeat Control

This control allows users to adjust level of the repeat effect, built into the KA720, the final level of which is adjusted by the 'delay+rev' controls on individual channels. Basically, it determines the degree of attenuation between each repeat.

11. Delay Control

This control allows users to adjust the delay time of the signal sent to the Echo Mix. Working in conjunction with the Repeat Control, users are able to apply a very interesting echoing effect to vocals, if they wish.

12. Reverb Control

This control allows users to add a reverb effect to their audio, basically controlling the level of the audio sent from the Echo mix to the main mix.

Main Section

13. Mic Master Volume Control

This control adjusts the volume of all microphone input channels combined, allowing users to easily adjust vocals to suit the music.

14. 2-band Music EQ (Low & High Controls)

Just like the EQ on each channel, the system EQ gives a shelving boost or cut of 15 dB to high frequency (12 kHz) and low frequency (80 Hz) sounds. Only the music inputs are affected by the system equalizer.

15. EFX In Control

This control adjusts the level of any signal fed through the EFX input, sent to the main audio mix.

16. Music Balance Control

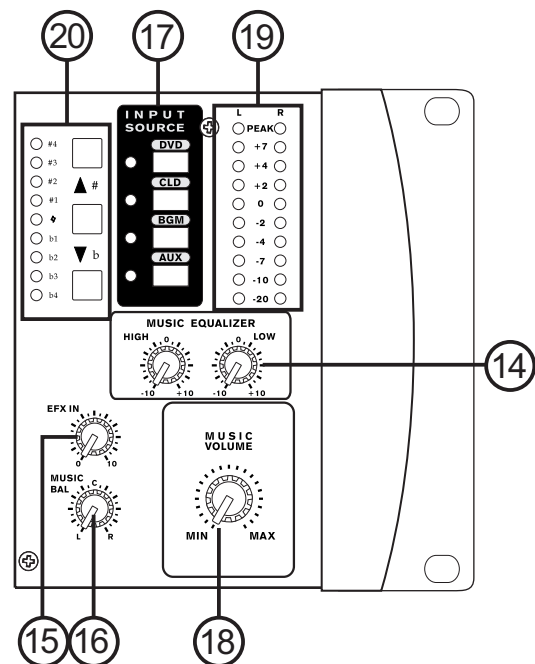
This alternates the degree or level of the music signal that the left and right side of the main mix should receive. By adjusting the balance control, users affectively attenuate the left or right audio signals according to the degree of their rotations.

17. Input Selection

These buttons allow users to select from the various inputs with the touch of a button. This ensures users to can simply switch from a single input source to another, without the hassle of rewiring

18. Master Volume Control

This control adjusts the volume of the music, allowing users to attenuate or intensify the level accordingly.



19. Level Meter

The KA720's level meter gives an accurate indication of when audio levels of the main signal reach certain levels. To make the maximum use of audio, set the various levels controls so that the uppermost LED of the level meter flashes only occasionally, or not at all.

20. Key Control and Indicators

This area allows users to control the key of the music currently selected (through use of the input select buttons), and does not affect the vocal channels whatsoever. The key can be increased or decreased in half-key increments by pressing the appropriate buttons (the top button being increase, the lower button being decrease). The center key is used to return the music back to its original state.

When a key is increase by half a step, two of the included LEDs will illuminate to indicate the key is half way between the two. When the key is increased by another half step, only the single LED will illuminate (and so on). The maximum a user can increase or decrease the key by is 4 steps.

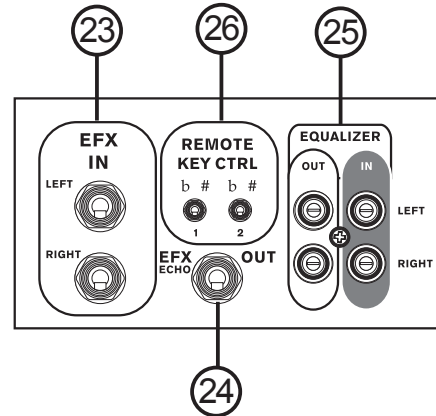
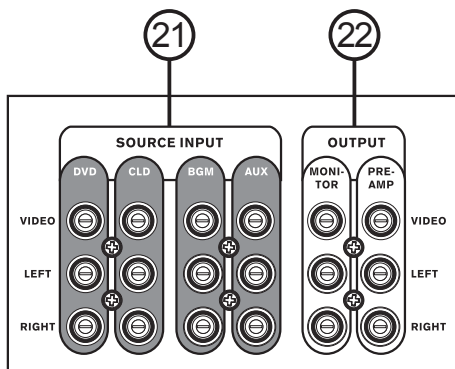
Rear Panel

21. Video and Audio Inputs

These RCA jacks allow users to connect video and audio inputs to the KA720. The RCA jacks are color-coded, yellow being video, white being the left audio channel and red being the right audio channel. Users are able to select from these inputs by using the Input Selection buttons on the front panel.

22. Video and Audio Outputs

These two sets of RCA jacks are for the output of video and audio from the KA720 to televisions or video projectors and/or stereo systems. The Preamp output (the output of which is not affected by the balance control on the front panel) can be used for displaying the video and audio signals to a small television set for monitoring purposes.



23. EFX Input

These 1/4" phone jacks are for returning the EFX signal to the KA720, after being processed by an external signal processor. The EFX Input signal is adjusted by the EFX In control located on the front panel of the KA720.

24. EFX Output

This jack outputs the main signal to external processors to be returned via the EFX input.

25. EQ In and Out

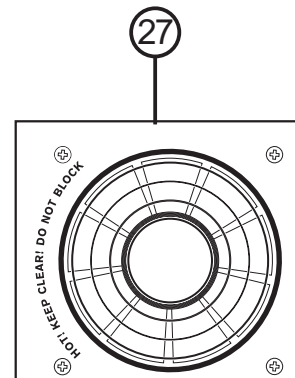
These stereo RCA inputs and outputs allow users to extract the main audio signal from the KA720, send it off to an external equalizer, and then return it to the device once more.

26. Remote Key Control

These 1/8" TRS inputs are for customized key control pedals. Users should wire their pedal so that when the connector's tip and sleeve form a connection, the key will go up by half a step and that when the ring and sleeve touch, the key will go down by half a step. A total of two remote key controls can be used simultaneously, both of which will affect the main Key Control unit on the front panel.

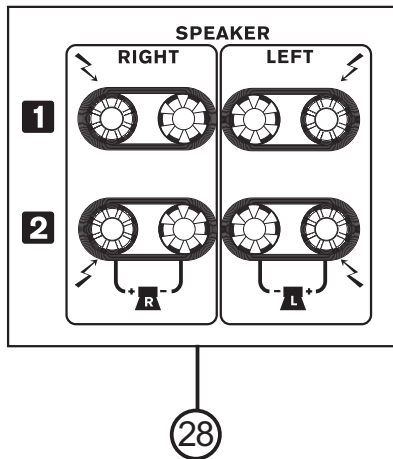
27. Fan

This fan is for cooling of the KA720 karaoke mixer, and should not be obstructed at any time. Doing so may cause overheating in the product.



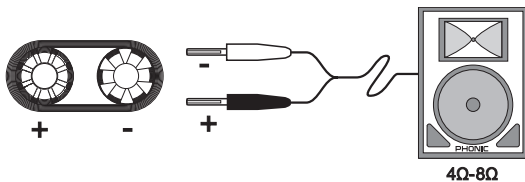
28. Main Output Jacks

These binding-post terminals are for the addition of passive speakers to the KA720. Users can connect standard banana plugs to these terminals to get the final amplified signal of the KA720. In addition to using banana plugs with the included binding posts, users may also opt to use free-wires to connect to the KA720. To do so, simply unscrew the binding post, slide the wire into the small hole in the binding post, and screw the binding post back in. Ensure no wire is exposed after the connection is made.



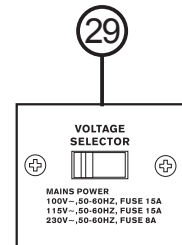
Connecting speakers

Binding Posts



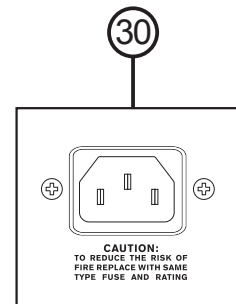
29. Voltage Selector

This switch allows users to adjust the KA720 to areas with varying voltage levels. For example, in the United States, the switch would be set to 115V, whereas in, say, England, it would be set to 230V. Users should check local voltage levels before operating this unit.

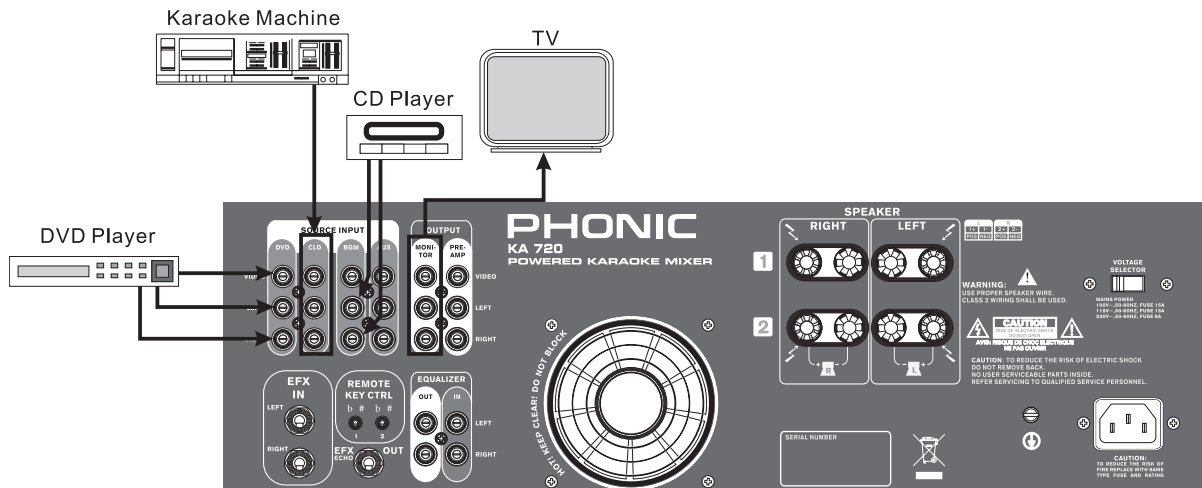
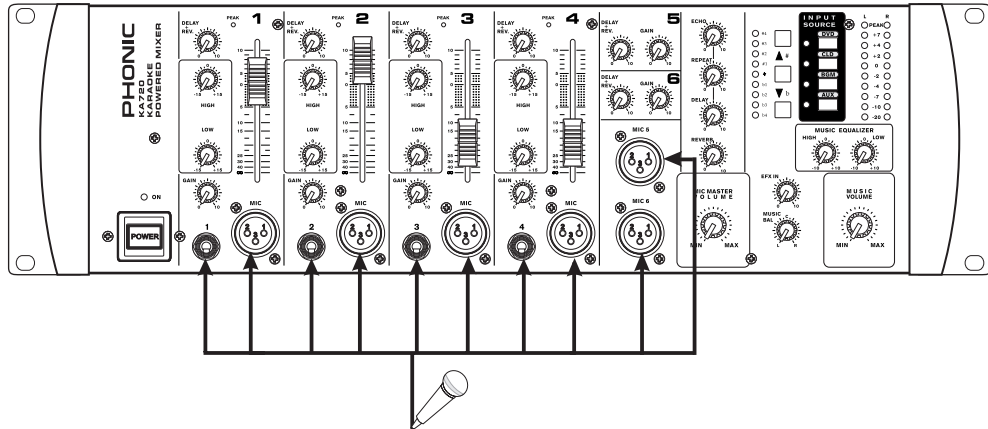


30. Power Connector

This is for the addition of an AC power source to the KA720 unit.



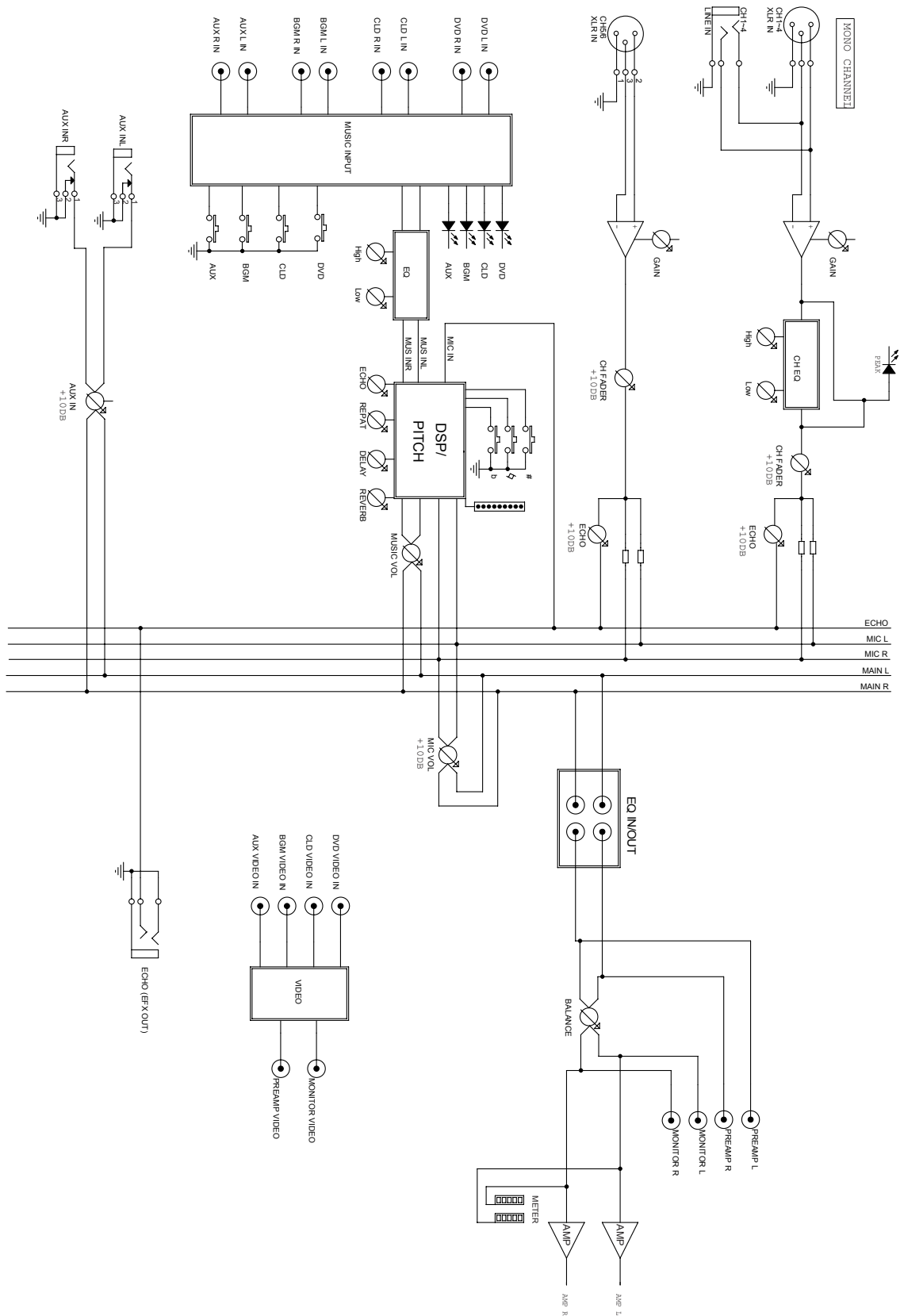
APPLICATION



SPECIFICATION

Power Amp	2 x 360W into 4 ohms
Inputs	
Mic	6 x XLR
Line	4 x 1/4"
EFX In	Stereo 1/4"
EQ in	1 stereo RCA
RCA Audio Source	6 stereo
RCA Video Source	4
Output	
Preamp out	1 stereo RCA + 1 video RCA
Monitor out	1 stereo RCA + 1 video RCA
EQ out	1 stereo RCA
Echo Send	1 Phone Jack
Speaker	Two pair Stereo Binding Post
Channels	
Fader	60 mm (-∞ to +10dBu)
EQ	2-band
Echo Send	per Channel
LED Indicators	
Input Channel Peak Light	Red (x4)
Source Input	Green (x4)
Key Change	Red (x8) - pitch shift; Green (x1) - neutral
Level Meter	2 x 10
EQ	2-band system
High	12 kHz +/-15dB
Low	80 Hz +/-15dB
Key Control	
Touch Control (face panel)	Up# & Down# in Half-key step
Wired Control (back panel)	Two Mini-TRS phone-jack for Individual control
Echo on Board	
Repeat (FB%)	0 - 96 %
Delay (ms)	0 - 800 ms
Reverb (sec)	0 - 2 sec
System	
Main Mic Volume	+10 dBu (max)
Main Music Volume	+18 dBu (max)
Frequency Response	20 Hz ~ 20 kHz ±2dB
Hum (all CH@0dB unity gain)	>-74 dBu
THD	0.02%
AC Mains	110-120V, 220-240V/50-60Hz
Crosstalk	>-80 dB
Dimensions (W x H x D)	482 x 133 x 415 mm (19" x 5.24" x 16.3")
Weight	10.3 kg (22.6 lb)

BLOCK DIAGRAM



TO PURCHASE ADDITIONAL PHONIC GEAR AND ACCESSORIES

To purchase Phonic gear and optional accessories, contact any authorized Phonic distributor. For a list of Phonic distributors please visit our website at www.phonic.com and click on Get Gear. You may also contact Phonic directly and we will assist you in locating a distributor near you.

SERVICE AND REPAIR

For replacement parts, service and repairs please contact the Phonic distributor in your country. Phonic does not release service manuals to consumers, and advice users to not attempt any self repairs, as doing so voids all warranties. You can locate a dealer near you at <http://www.phonic.com/where/>.

WARRANTY INFORMATION

Phonic stands behind every product we make with a no-hassles warranty. Warranty coverage may be extended, depending on your region. Phonic Corporation warrants this product for a minimum of one year from the original date of purchase against defects in material and workmanship under use as instructed by the user's manual. Phonic, at its option, shall repair or replace the defective unit covered by this warranty. Please retain the dated sales receipt as evidence of the date of purchase. You will need it for any warranty service. No returns or repairs will be accepted without a proper RMA number (return merchandise authorization). In order to keep this warranty in effect, the product must have been handled and used as prescribed in the instructions accompanying this warranty. Any tempering of the product or attempts of self repair voids all warranty. This warranty does not cover any damage due to accident, misuse, abuse, or negligence. This warranty is valid only if the product was purchased new from an authorized Phonic dealer/distributor. For complete warranty policy information, please visit <http://www.phonic.com/warranty/>.

CUSTOMER SERVICE AND TECHNICAL SUPPORT

We encourage you to visit our online help at <http://www.phonic.com/support/>. There you can find answers to frequently asked questions, tech tips, driver downloads, returns instruction and other helpful information. We make every effort to answer your questions within one business day.

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