

KUSTOM

OWNER'S MANUAL

KMA65/100

Thank you for purchasing the Kustom KMA65/100 model keyboard/mixer amplifier. Kustom has listened to musicians throughout the world and stands proudly behind each and every one we make. It was designed with your needs in mind. Flexible, feature laden, great sounding, able to adapt to all kinds of music, this amplifier really delivers what you have been looking and waiting for. Whatever style you choose, it's ready! Kustom, with a 30 year tradition of excellence in design, proudly delivers to you this amp and rewards you with a rugged and dependable amp designed and engineered in the USA. Again, thank you for your purchase. Please take a few minutes to learn about all the professional features that are built in.

SPECIFICATIONS

Model	Power	Equalizer	Channels	Impedance	Effects	Amplifier Type	Dimensions	Weight
KMA65	65 W	4 Band	Three	8 Ohms	8 Preset Digital EFX	MOS-FET Transistor	21"x11.5"x17.5" 53.4x29.2x44.5cm.	56 lbs. 21.1 kg.
KMA100	100W						24"x14.6"x17.5" 61.1x37x44.5cm.	68 lbs. 30.1 kg.

DANGER

EXPOSURE TO EXTREMELY HIGH NOISE LEVELS MAY CAUSE A PERMANENT HEARING LOSS. INDIVIDUALS VARY CONSIDERABLY TO NOISE INDUCED HEARING LOSS BUT NEARLY EVERYONE WILL LOSE SOME HEARING IF EXPOSED TO SUFFICIENTLY INTENSE NOISE FOR A SUFFICIENT TIME.

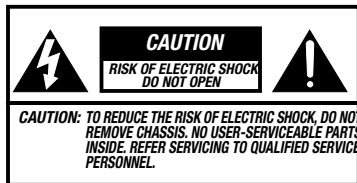
THE U.S. GOVERNMENT'S OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) HAS SPECIFIED THE FOLLOWING PERMISSIBLE NOISE LEVEL EXPOSURES:

DURATION PER DAY IN HOURS	SOUND LEVEL db FLOW RESPONSE
8	90
6	93
4	95
3	97
2	100
1	103
1/2 HR. or LESS	110

ACCORDING TO OSHA, ANY EXPOSURE IN THE ABOVE PERMISSIBLE LIMITS COULD RESULT IN SOME HEARING LOSS. EAR PLUGS OR PROTECTORS IN THE EAR CANAL OR OVER THE EARS MUST BE WORN WHEN OPERATING THIS AMPLIFICATION SYSTEM IN ORDER TO PREVENT A PERMANENT HEARING LOSS. IF EXPOSURE IN EXCESS OF THE LIMITS AS PUT FORTH ABOVE, TO INSURE AGAINST POTENTIALLY HARMFUL EXPOSURE TO HIGH SOUND PRESSURE LEVELS. IT IS RECOMMENDED THAT ALL PERSONS EXPOSED TO EQUIPMENT CAPABLE OF INDUCING HIGH SOUND PRESSURE LEVELS, SUCH AS THIS AMPLIFICATION SYSTEM, BE PROTECTED BY HEARING PROTECTORS WHILE THIS UNIT IS IN OPERATION.

WARNING!

- THIS APPARATUS SHALL NOT BE EXPOSED TO DRIPPING OR SPLASHING. NO OBJECTS FILLED WITH LIQUIDS SUCH AS VASES SHALL BE PLACED ON THE APPARATUS.
- TO AVOID ELECTRICAL SHOCK, DO NOT DISASSEMBLE. REFER SERVICING TO QUALIFIED PERSONAL ONLY!



AVIS: RISQUE DE CHOC ELECTRIQUE-NE PAS OUVRIR.



THIS SYMBOL 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.



THIS SYMBOL IS INTENDED TO ALERT THE USER TO THE PRESENCE OF IMPORTANT OPERATING AND MAINTENANCE (SERVICING) INSTRUCTIONS IN THE LITERATURE ACCOMPANYING THE UNIT.

IMPORTANT

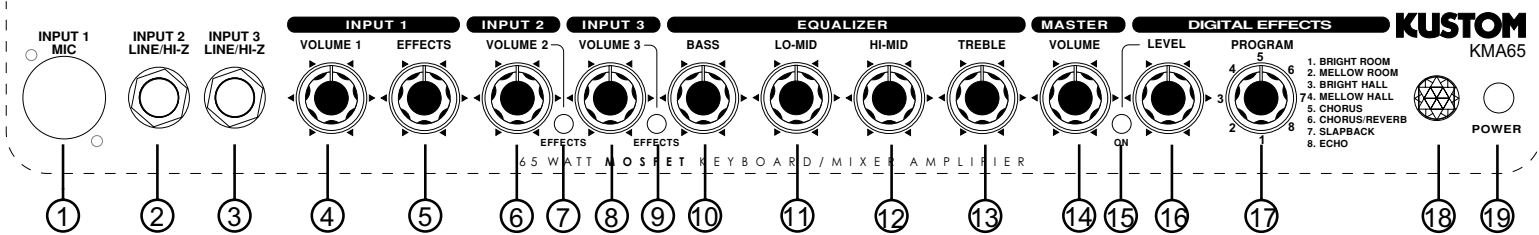
1. Read all safety and operating instructions before using this product.
2. All safety and operating instructions should be kept for future reference.
3. Obey all cautions in the operating instructions and on the back of the unit.
4. All operating instructions should be followed.
5. This product should not be used near water i.e. bathtub, sink, swimming pool, wet basement, etc.
6. This product should be located so that its position does not interfere with proper ventilation. It should not be placed flat against a wall or placed in a built-in enclosure that will impede the flow of cooling air.
7. This product should not be placed near a source of heat, such as a stove, radiator, or another heat producing amplifier.
8. Connect only to a power supply of the type indicated on the back of the amplifier near the power supply cord.
9. Do not break off the ground pin of the power supply cord.
10. Power supply cords should always handled carefully. Never walk or place equipment on power supply cords. Periodically check cords for cuts or signs of stress, especially at the point where the cord exits the unit.
11. The power supply cord should be unplugged when the unit is unused for long periods of time.
12. If this product is to be mounted in an equipment rack, rear support should be provided.
13. Metal parts and vinyl covering may be cleaned with a damp rag.
14. Care should be taken so that objects do not fall and liquids are not spilled into the unit through the ventilation ports or any other openings.
15. This unit should be checked by a qualified service technician if:
 - A. The power supply cord or plug has been damaged.
 - B. Anything has fallen or been spilled into the unit.
 - C. The unit does not operate correctly.
 - D. The unit has been dropped or the enclosure damaged.
16. The user should not attempt to service this equipment. All service work must be done by a qualified service technician for warranty repairs.

CAUTION

THIS AMPLIFIER HAS BEEN DESIGNED AND CONSTRUCTED TO PROVIDE ADEQUATE POWER RESERVE FOR PLAYING MODERN MUSIC WHICH MAY REQUIRE OCCASIONAL PEAK POWER. EXTENDED OPERATION AT ABSOLUTE MAXIMUM POWER IS NOT RECOMMENDED SINCE THIS COULD DAMAGE THE ASSOCIATED LOUDSPEAKER SYSTEM. PLEASE BE AWARE THAT MAXIMUM POWER CAN BE OBTAINED WITH VERY LOW SETTINGS OF THE MASTER VOLUME CONTROLS IF THE INPUT SIGNAL IS VERY STRONG.

KUSTOM

Kustom Inc., 4940 Delhi Pike, Cincinnati, OH • USA
(800) 999-5558 Fax: (513) 347-2192 / www.kustom.com



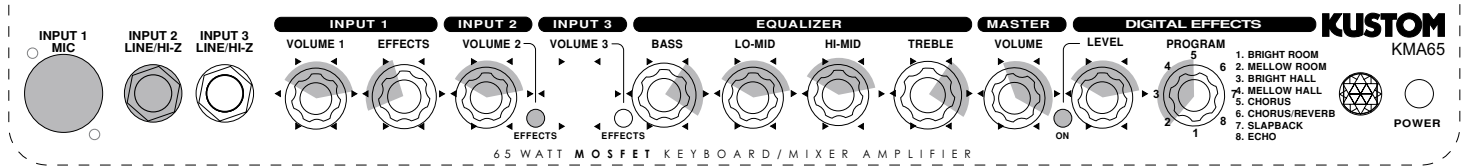
- 1.) **Mic Input** - this is a 3 cond. XLR input jack for plugging in Lo-Z microphone or keyboard inputs. It has +15v Phantom Power for condenser microphones.
- 2.) **Line Input #2** - this 1/4" 2 conductor jack that allows you to plug in a Hi-z mic or keyboard or any line level source. It will also accept guitar level signals as well.
- 3.) **Line Input #3** - this is a 1/4" 2 conductor input jack that will also allow you to plug in a Hi-z mic or keyboard or any line level source. It will also accept guitar level signals as well.
- 4.) **Volume 1** - this is the level control for Input #1. Slowly increase the control to increase the volume. If you are using a keyboard with a preamp, set it's level for a mid position before increasing this control, otherwise distortion may occur. Both inputs follow the same tone circuit as the other input.
- 5.) **Effects** - this control determines how much signal from Input #1 goes to the effects buss. Clockwise sends more signal to the buss.
- 6.) **Volume 2** - this is the level control for Input #2. As above on Volume #1, the same applies.
- 7.) **Effects On/Off** - this switch determines whether the signal from Input #2 goes to the effects buss. The overall level on the Effects Level control determines the effects level on that input.
- 8.) **Volume 3** - this is the level control for Input #3. As above on Volume #1, the same applies.
- 9.) **Effects On/Off** - this switch determines whether the signal from Input #3 goes to the effects buss. The overall level on the Effects Level control determines the effects level on that input.
- 10.) **Low** - this control is the bass control for the amplifier. It is active and is set to boost or cut frequencies at 100Hz. Turning it fully clockwise, the signal is boosted +12db. Turning it counterclockwise, the low will be rolled off -12db.
- 11.) **Lo-Mid** - this control is the lower midrange control for the amplifier. It is active and set to boost or cut frequencies at 500Hz. Turning it fully clockwise, the signal is boosted +12db. Turning it counterclockwise, the low will be rolled off -12db.
- 12.) **Hi-Mid** - this control is the upper midrange control for the amplifier. It is active and set to boost or cut frequencies at 1.5KHz. Turning it fully clockwise, the signal is boosted +12db. Turning it counterclockwise, the low will be rolled off -12db.
- 13.) **High** - this control is the high frequency control for the amplifier. It is active and set to boost or cut frequencies at 5KHz. Turning it fully clockwise, the signal is boosted +12db. Turning it counterclockwise, the low will be rolled off -12db.
- 14.) **Master Volume** - this is the Master Volume control for the entire amplifier.
- 15.) **Effects On/Off** - this switch engages the digital effects section.
- 16.) **Effects Level** - this control adds the digital effects section and mixes it into the main signal buss. Several different effects are available.
- 17.) **Program Select** - this switch will select any of eight different effects. 4- Reverbs, 2- Echos, 1-Chorus and 1-Chorus/Reverb.
- 18.) **Jewel Light** - this jewel light lets you know that the amplifier is on.
- 19.) **Power** - this switch turns on and off the AC power to the amp.

Back Panel - (not pictured)

- Speaker Out** - this is a 2 conductor 1/4" speaker output jack. This will disconnect the internal speaker and allow an external speaker cabinet to be employed. Rating is 8 ohms.
- Line Output** - this is a 2 conductor 1/4" line output jack. This will allow an external amplifier or mixing board to be supplied with the signal from this amp.
- Effects Loop I/O** - these are 2-2 conductor 1/4" jacks. This will allow an external effects device or equalizer to be patched back in before the power amp section in this amp. One is send and the other is return.
- Footswitch Jack** - this is a 3 conductor 1/4" jack. This is for hooking up a footswitch to turn on/off the effects section.

Suggested Settings

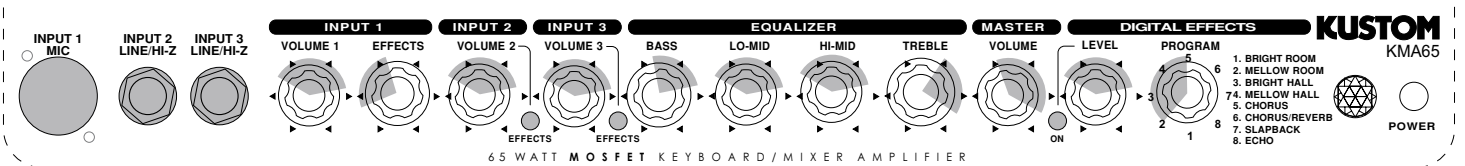
(These settings are general starting points. They are designed to get you close to the sound you are looking for. If the control is not shown, then it doesn't apply to this particular sound.)



Standard Dual Instrument Setup - in this setup one, two or three keyboards or instruments are plugged into Inputs 1, 2 & 3. (Remember, if you are using pre-amplified keyboards or a drum machine, we suggest that you turn their output levels to about mid way up and this will give you a cleaner sound as well as giving you available headroom for leads.) You can also plug in any combination of keyboards, microphones or guitars. The multi-instrument setup is especially useful for teaching studios.

Of course, you can adjust the tone controls to any desired sound, but in this setup we suggest these tone control settings. It will deliver a clear, clean sound that has enough top end clarity to cut through. Add low and low mid for a beefier presence but be careful as this can “muddy up” the sound.

Adjust the Effects section to suit the music or to your taste.



Standard Dual/Triple Microphone Setup - in this setup Lo-Z and two Hi-Z microphones are plugged into Inputs 1, 2 & 3. This is a basic mini-PA system. This can be also be used for plugging in a CD player or cassette decks and a microphone for karaoke, teaching studios, small public address or even DJ work. It can be used for singing over prerecorded tapes with mixing capabilities.

As mentioned earlier, you can adjust the tone controls to any desired sound, but in this setup we suggest these tone control settings. Of course it depends on the listening environment. It will deliver a clear, clean sound that has enough top end clarity to let the voices cut through.

Adjust the Effects section to suit the music or to your taste. In public address work, you usually don't use Chorus or Delay unless you are singing.