# KeyPro KP-100S

## -INTRODUCTION-

The Motion Sound **KeyPro KP-100S** provides a significant improvement in sound quality and portability for professional and amateur musicians alike. The encompassing three-dimensional stereo sound is a true compliment to modern keyboard synthesizers, digital pianos, sound modules, guitar synthesizers and any application that can benefit from stereo sound.

Although operation may seem intuitive, we suggest that you read this manual for helpful tips and/or details about controls and operation of the KP-100S in various venues and environments.

# -WARNING-

\*\*\* The KP-100S can produce high sound pressure levels. Hearing protection is advised. The KP-100S must be earthed for safe operation.

### -SPECIFICATIONS-

<u>Input Design Range</u> – 300mV RMS, 2.5 V RMS max

Input Impedance – 50K, 100 pf

<u>Power Amplifier</u> – 50-watts RMS/channel, (100-watt RMS total)

Speakers – Two 8" Eminence Alpha, 125-watt, 8 ohms

Horns - Two 80-watt 3.5X3.5 Ferro cooled dynamic

Frequency Responses – 70-17 kHz

Crossover – 3 kHz

<u>Power</u>	<u>Voltage</u>	<u>Frequency</u>	<u>Watts</u>	Fuse (slo-blo)
US	117 VAC	50/60 Hz	160	2 amp
Europe	230 VAC	50/60 Hz	160	1 amp
Japan	100 VAC	50/60 Hz	160	2 amp

Fuse – Located in the AC inlet module.

<u>Finish</u> – Two-part Polymaric<sup>™</sup> tough polymer finish on MDF.

Dimensions - H 15", W 19", D13" Weight 38 lbs.

# -Quick Start Setup-

Set the KP-100S volumes to zero. Turn all EQ and the expander to normal "N" position. Set your keyboard or sound source volume to 50%. Increase the KP-100S instrument and/or microphone volumes to desired level.

# -Sound--What to Expect-

The quality of the stereo 3D expander is totally dependent on a good stereo signal source; it will NOT create a stereo image from a mono source. The KP-100S is ideally placed in back of you at about 2 ft. above the floor. Your position should be at amplifier center for best expander stereo effect.

Experience has shown that placing the amplifier on the floor can provide more bass, but depending on how close you are to the KP-100S, you may not hear enough treble. Tilting the KP-100S back slightly can help direct more "highs" toward you. All rooms will sound different; experimenting with amplifier placement can improve the sound to you and your audience.

#### -Control Panel-

<u>Inputs</u>: Two sets of unbalanced ¼ stereo pairs. If you have a mono signal and want both channels to respond use the right/mono input. All inputs are available simultaneously.

<u>Microphone Inputs:</u> A balanced XLR and unbalanced ¼" input is provided, they can be used simultaneously. The microphone volume controls both inputs and the tone controls are global for all inputs.

Expand: Expand control increases the stereo spread. The control is totally dependent on the quality of the stereo source. Mono = No expand. Too much expand may change the tone of some sounds. Use only enough for effect and then readjust the channel EQ if needed. A typical setting is 3-5.

<u>Bass:</u> <150Hz. Low frequency boost/cut. If you have a bass player, set this at about 3-5. Bass uses a lot of power and can make your sound muddy, adjust carefully to preference. If you use the <100Hz sub-woofer output, read that section first.

<u>Middle:</u> Controls frequencies from 150 Hz to 3 kHz. This is the most important frequency range of many instruments. Set at 5 and then vary according to preference.

<u>Treble</u>: Adjusts sound above 3kHz. Treble is the highest frequency content of sound and the most directional part of the spectrum. Set at 5 initially and adjust to preference. The highest frequencies do not travel very far in air, so don't fry your ears with searing highs that will never reach an audience.

## -XLR Line Outputs-

Left and right channels are output for feed to mixing boards. The level is "high" microphone, 2 V p-p 600ohms nominal impedance. The XLR line outputs will work well in most venues. If there is a very large difference in ground potential between the KP-100S and the mixing board in use, you may need to use transformer isolation or "ground float" boxes to eliminate noise. Many older buildings can have ground problems. Check AC outlets to prevent shock and to ensure proper KP-100S grounding. Volume, expand and EQ effect XLR output signals.

# -<100 Hz Sub-woofer Output-

\(^4\) unbalanced, 300 mV rms, 12dB oct @ 100Hz. This output is used for bass or sub-woofer augmentation of the KP-100S, such as with a **Motion Sound SW-15 Subwoofer**. Set the bass control on the KP-100S at 5 or lower and let your external bass amplifier handle the lows. The KP-100S will then have full power available for mid and high frequencies. Using the 100Hz output does not disable those frequencies from the KP-100S.

## -Maintenance and Service-

Motion Sound or an authorized service center must perform all warranty service.

<u>Polymaric™ Coating</u>: This polymer finish is extremely rugged. It can be cleaned with mild soap and water if needed. No other maintenance is necessary.

<u>Speakers:</u> Remove screws from the grill cover and remove the grill. The 8" speakers and 3.5" horns are mounted from the front with screws into steel inserts. Wires from the amplifier to the speakers and ferro cooled dynamic horns are removable spade type. If you change speakers, use 8 ohms models only.

<u>Amplifier:</u> The entire amplifier chassis is mounted from the rear outside. Remove all screws on top and around the back of the amplifier chassis. You must remove the speaker wires from the front (remove 8" speaker first) before the amp chassis can be entirely removed.