



Motion Sound is a division of XP Audio Inc.

***KeyPro* KP-500SN Stereo 3D Amplifier**

Designed and manufactured in the USA.



12/30/08

-Important Safety Instructions-

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings.
8. Install and operate in accordance with the manufacturer's instructions.
9. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
10. Do not defeat the safety purpose of the polarized or grounding-type (earthing-type) plug. For U.S. applications, a polarized plug has two blades with one wider than the other. A grounding -type (earthing-type) plug has two blades and a third grounding (earthing) prong. The wide blade and the third prong are provided for your safety. If the provided plug does not fit into your power outlet, consult an electrician for replacement of the obsolete or damaged outlet.
11. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
12. Only use attachments and accessories specified by the manufacturer.
13. 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.
14. Unplug this apparatus during lightning storms or when unused for long periods of time.
15. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as the power-supply cord/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.

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



CAUTION

**RISK OF ELECTRIC SHOCK
DO NOT OPEN
RISQUE DE CHOC ÉLECTRIQUE NE PAS OUVRIR**






**CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK
DO NOT REMOVE COVER (OR BACK)
NO USER-SERVICEABLE PARTS INSIDE
REFER SERVICING TO QUALIFIED PERSONNEL**

ATTENTION: POUR ÉVITER LES RISQUES DE CHOC ÉLECTRIQUE, NE PAS ENLEVER LE COUVERCLE. AUCUN ENTRETIEN DE PIÈCES INTÉRIEURES PAR L'USAGER. CONFIER L'ENTRETIEN AU PERSONNEL QUALIFIÉ.

AVIS: POUR ÉVITER LES RISQUES D'INCENDIE OU D'ELECTROCUTION, N'EXPOSEZ PAS CET ARTICLE A LA PLUIE OU A L'HUMIDITE

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 apparatus.

Le point d'exclamation l'intérieur d'un triangle équilatéral est employé pour alerter l'utilisateur de la présence d'instructions importantes pour le fonctionnement et l'entretien (service) dans le livret d'instruction accompagnant l'appareil.

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.

Le symbole clair avec point de fleche l'intérieur d'un triangle équilatéral est utilisé pour alerter l'utilisateur de la présence l'intérieur le coffret de "voltage dangereux" non isolé d'ampleur suffisante pour constituer un risque d'électrocution.

16. This Motion Sound amplifier has been designed with Class-I construction and must be connected to a mains socket outlet with a protective grounding (earthing) connection (the third grounding/earthing prong).
17. This Motion Sound amplifier has been equipped with a single pole, rocker-style AC mains power switch. This switch is located on the rear panel and should remain readily accessible to the user.
18. This apparatus does not exceed the Class A/Class B (whichever is applicable) limits for radio noise emissions from digital apparatus as set out in the radio interference regulations of the Canadian Department of Communications.

Duration Per Day In Hours	Sound Level dBA, Slow Response	Typical Example
8	90	Quiet small club
6	92	
4	95	Subway Train
3	97	
2	100	Very loud classical music
1.5	102	
1	105	Screaming fans at sports
0.5	110	
0.25 or less	115	Loud rock concert

ATTENTION – Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de class A/de class B (selon la cas) prescrites dans le règlement sur le brouillage radioélectrique édicté par les ministere des communications du Canada.

19. Exposure to extremely high noise levels may cause permanent hearing loss. Individuals vary considerably in susceptibility to noise-induced hearing loss, but nearly everyone will lose some hearing if exposed to sufficiently intense noise for a period of time. The U.S. Government's Occupational Safety and Health Administration (OSHA) has specified the permissible noise level exposures shown in the following chart. According to OSHA, any exposure in excess of these permissible limits could result in some hearing loss. To ensure against potentially dangerous exposure to high sound pressure levels, it is recommended that all persons exposed to equipment capable of producing high sound pressure levels use hearing protectors while the equipment is in operation. Ear plugs or protectors in the ear canals or over the ears must be worn when operating the equipment in order to prevent permanent hearing loss if exposure is in excess of the limits set forth in the following chart.

-INTRODUCTION-

The Motion Sound **KeyPro KP-500SN** stereo hi-fidelity amplifier provides premium 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-500SN in various venues and environments.

-SPECIFICATIONS-

Input Design Range – 300 mV RMS, 2.5 v RMS max

Input Impedance – 100K

Power Amplifier – 250-watts/channel (500-watts total)

Speakers – Two 12” Eminence Deltalite 250-watts, 8 ohms

Horns – Four 80-watt 3.5X3.5 Ferro cooled dynamic, 8 ohms

Frequency Response – 45-17 kHz

Horn Crossover – 3 kHz

<u>Power</u>	<u>Voltage</u>	<u>Frequency</u>	<u>Fuse (slo-blo)</u>
US	120 VAC	50/60 Hz	8 amp
Europe	230 VAC	50/60 Hz	4 amp
Japan	100 VAC	50/60 Hz	8 amp

Fuse – Located in the AC inlet module (**Replace with correct value only**)

Finish- Two-part Polymaric™ polymer finish.

Poplar wood cabinet tough, light weight construction

Dimensions – H 18 1/2”, W 26 1/4”, D 17” Weight 48 lbs.

-Quick Start Setup-

After powering on and connecting your signal source:

1. Set all controls to “5”
2. Master volume – quiet room 3-5, loud band 7-10
3. Master low bass to “5”

-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-500SN is ideally placed 3-6 ft. 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-500SN, you may not hear enough treble. Tilting the KP-500SN back slightly can help direct more “highs” toward you.

All rooms will sound different; experimenting with amplifier placement can improve the sound for your audience.

-Control Panel-

The KP-500SN has two input channels and a master control area. Channels one and two are the same.

Inputs: 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.

Micophone input: A balanced XLR microphone input (located on rear panel) is assigned to channel two's volume and EQ controls. It is a mono input to left and right channels and XLR line outputs. The XLR input works simultaneously with channel two's ¼" inputs. The XLR input is AC coupled so phantom powered microphones can be used. (The KP-500SN does not supply phantom power).

Volume works in conjunction with your signal source volume and volume pedal (if used). Typical setting is 4-6 and should be adjusted so that your signal source/volume control covers the desired range.

Expand control increases the stereo spread. The control is totally dependent on the quality of a stereo source. Mono=No expand. Too much expand may change the tone of some sounds. Use only enough for effect and then adjust the channel EQ if needed.

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

Middle controls frequencies from 150 Hz to 3 kHz. This is the most important frequency range of most instruments---set at “5” and then vary according to preference.

Treble adjusts sound above 3 kHz. 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.

Master Volume

Normally set at 5-8. If you are playing quietly and input levels are within the normal range, you can adjust the master volume for quiet amplifier operation. Higher numbers 5-10 allow maximum headroom, but produce more pre-amp "hiss". Higher settings should be used in loud band situations.

Master Low Bass

The low bass master control provides boost/cut at 50 Hz. These frequencies are important for reproducing sounds such as grand piano and Organ. Low frequencies use a lot of power and can muddy up your sound when a bass player is in the mix. Use only enough to get the sound you are after.

XLR Line Outputs

Left and right channels are output for feed to mixing boards. The XLR line outputs will work very well in most venues. If there is a very large difference in ground potential between the KP-500SN 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-500SN grounding. Volume, expand and EQ affect XLR output signals.

Slave Output

Outputs left and right audio from the master volume control to a slave amplifier. The connector is standard "midi" style for convenience in obtaining cords but does not send midi data. The cord must use all five conductors. You can use several slave amplifiers, take just the right amount of power to a venue, and always have stereo 3D sound! Play next to a Guitar stack? No problem!

Subwoofer Output

¼ unbalanced, 300 mv rms, 12 db oct @ 300 Hz. This output is used for bass or sub-woofer augmentation of the KP-500SN, such as with a **Motion Sound SW-15 Subwoofer**. Set the bass control on the KP-500SN at 5 or lower and let your external bass amplifier handle the lows. The KP-500SN will then have full power available for mid and high frequencies. Using the subwoofer output does not disable those frequencies from the KP-500SN.

Maintenance

Finish: Clean with mild soap and water if needed. No other maintenance is necessary.

Speakers: Remove screws from the grill cover and remove the grill. The 12" speakers are mounted from the front with screws into steel inserts. The horns are mounted from the rear with screws and nuts. Wires from the amplifier to the 12" speakers and ferro cooled dynamic horns are removable spade types. If you change speakers, use 8 ohm only.

Amplifier: 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 12" speakers first) before the amp chassis can be entirely removed.

Motion Sound Service and Warranty

****Non-transferable warranty-applies only to the original owner.**

****Any unit sold as a second, damaged product, scratch & dent, old store stock, rental units, will NOT be covered under the Motion Sound warranty.**

The cabinet, electrical and associated mechanical parts and workmanship is warranted for a period of 1 year from date of purchase, with the following exceptions:

- Any speaker, horn, or diaphragm is covered for 90 days
- Fuses are not covered
- Any Motion Sound pedal is covered for 90 days
- Any product that has been modified altered or repaired outside of an authorized Motion Sound facility is not covered.
- This warranty is void if the product has been physically or electrically abused.
- Damage unrelated to intended use is not covered

All warranty repair will require a return authorization number (RA#).

Call Motion Sound at 801-265-0917 for authorization before any repairs are done. Without a RA# Motion Sound is not responsible to pay the warranty or parts cost. Motion Sound does have authorized repair centers we can refer you to, but again a RA# must be issued. If there is not an authorized repair center in your area it is the owners' responsibility to return the unit insured freight prepaid to the Motion Sound Service Department. Shipping Address:

4426 South 450 West, Suite G

Salt Lake City, UT 84123

For units to be repaired under **warranty** a dated bill of sale must accompany the unit or your warranty card must be on file at Motion Sound. **Use the original carton and packing material to ship your unit.** Motion **Sound** is not responsible for damage due to improper packing!.

NOTE: If Motion Sound or any authorized service center finds nothing wrong with the product it will be the owners responsibility to pay the cost of service, which includes packaging, shipping, plus a minimum 1 hr service fee.

This warranty gives you certain rights. You may also have other rights, which may vary, from state to state.