

Navisonaudio
The natural sound



SE-MKI

STEREO PREAMPLIFIER OWNER'S OPERATING MANUAL

Introduction

Congratulations on your investment in a Navison audio SE-MKI Vacuum Tube Stereo Preamplifier. It is designed to serve as a reference standard of truthful musical performance. The care in engineering and manufacturing of this product anticipates a lifetime of enjoyment. Please take a few minutes to read through this booklet so that you may become familiar with the features, proper operation and care procedures of this precision component.

We also encourage you to enlist the aid of the dealer from whom you purchased this Navison audio preamplifier. Your dealer is an excellent source of information on compatibility, installation, and troubleshooting, and should be capable of helping ensure that your overall music system provides you with maximum satisfaction.

If you would like to speak directly with someone from Navison audio, you are welcome to phone, fax, or write us using the numbers and addresses listed in the limited warranty for Navison audio components section of this manual.

Unpacking, Handling, And Packing Your SE-MKI

Be sure to keep the outer shipping carton as well as the inner packing carton and all packing materials. Should your SE-MKI need service or possible updates, it must be shipped to Navison audio or an authorized Navison audio service center in its original packing materials.

UNPACKING

1. Lift the unit out of the inner carton by grasping it firmly by the sides and pulling it up and out of the carton with the custom foam blocks in place. The protective cotton bag is slippery, so be sure you have a firm grip.
2. After setting the unit with foam blocks down on a large and safe surface (such as the floor), support the under side with one arm while gently pulling the front and rear packing blocks straight away from the chassis.
3. Untape the opening of the cotton bag, and carefully reach in and slide the preamp out. You may need to place a hand between the cotton bag and the bottom plate to raise the unit enough to allow you to separate the preamp from the bag more easily.
4. We suggest that you fold the protective cotton bag in such a way that dust and dirt is kept from getting inside. Store the bag and the foam blocks inside the cartons. Store the inner carton nested in the outer carton, and apply a strip of packing tape to the outer carton to keep out dirt, insects, and pests. The cartons should be stored in a dry location.

HANDLING TIPS

1. Always be sure your hands are clean and free of any dirt or oils before carrying your Navison audio preamp.
2. Carry the preamp with both hands by gripping its sides. Be sure you have it well balanced, as the power transformer at the left-rear of the unit is a substantial weight.
3. If you must support or rest the unit against your body, be sure that the back connector panel is what gets pressed against you. Never hold the face panel of the unit against your clothing as coarse materials, stitching, belts and the rivets from denim pants (!) can mar the polished surfaces.
4. The control knobs of the SE-MKI protrude further from the faceplate than is typical with other components. Please be careful when walking through doorways and when positioning the unit on a shelf or stand, so as to avoid impact to the controls.
5. Never set anything (CDs, LPs, papers, or other equipment) directly on top of the unit.

PACKING

1. Slide the preamp into the protective cotton bag so that the bag opening ends up at the left or right side-not at the front or back of the unit.
2. Put the proper foam packing block on the rear of the unit (the blocks are marked).
3. On a firm surface, stand the unit upright on the installed back foam block, but maintain a secure grip to prevent it from falling over.
4. Make sure that there is ample slack in the bag over the faceplate and knobs as installing the front foam greatly tightens the bag over the knobs. Install the front foam packing block.
5. If the power cord is to be packed with the preamp, place it in the bottom of the box at this time. Fine scratching of the top plate finish may occur if the unit is shipped with the cord packed loose on top.
6. With a firm grip on the sides of the preamp, carefully lower it into the original inner carton.
7. If the inner and outer cartons have been separated, place the inner carton back into the original outer carton. If the outer carton has been lost or damaged, the inner carton must be placed into a suitably sized double-thick packing carton before shipment, If such a carton is slightly oversize, place a sufficient quantity of styrofoam packing (peanuts or blocks) around the outside of the inner carton to prevent shifting during transit.

Limited Warranty For Navison audio Components

Navison audio design, inc. will provide service under warranty to the original owner on products sold new in the United States for the lesser period of three years from the date of purchase by the original purchaser, or five years from the date of shipment to the authorized Navison audio dealer. During the warranty period, Navison audio will repair defective units without charge for labor or parts (with the exception of vacuum tubes and batteries).

Exclusions. The following are not covered under this warranty:

- a) Units which have been damaged by misuse, abuse, or accident.
- b) Units which have been modified, altered, or improperly repaired by anyone not specifically authorized by Navison audio design, Inc.
- c) Units not purchased from an authorized Navison audio dealer in the United States for use in the United States.
- d) Normal wear.
- e) Incidental or consequential damages are not covered under this warranty. Some states do not allow the exclusion of incidental or consequential damages, so this exclusion may not apply to you.

Obtaining Warranty Service: To obtain warranty service, the unit must be shipped, along with evidence of purchase, in factory packing to Navison audio design (or designated service center) with freight and insurance prepaid by the owner. After repair, the unit will be returned with freight and insurance prepaid by Navison audio design to any destination in the United States.

All implied warranties, including merchantability and fitness for a particular purpose are limited in duration to the duration of this express warranty. Some states do not allow limitations on the duration of implied warranties so the above limitations may not apply to you.

The warranty on the Navison audio of products is transferable to subsequent owners provided that the warranty registration card has been filled in and returned to Navison audio design, inc. within 30 days of the original purchase, and that the registered owner provides the factory with a signed notice giving model and serial number of the unit, and the new owner's name and address.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

Navison audio products purchased outside the United States are covered by warranty terms of the importing distributor in the country in which the product was originally purchased, which may differ from the terms set out herein. Importing distributors are not obligated to provide warranty service for products originally purchased outside their country. Navison audio will provide warranty service for products outside the United States, but in these cases, the customer must pay all shipping, handling and customs costs both to and from our Service Department.

Questions about this warranty should be addressed to

Service Department

Navison Audio Design, Inc.
1551 Shaw Drive San Jose CA 95118.

The Navison audio service department can also be reached by

- Email: custservice@navisonaudio.com
- Phone: 408-269-6800
- Fax: 408-269-6801

Toll free number

- 1-877-NAV-IZON or (628-4966)

Service

If your Navison audio component requires service, repack it using the original box and packing material and ship to the Service Department address above. Boxes and packing materials can be obtained from our service department for a nominal charge, if you no longer have yours. Include with the unit a note describing the problem you are having in as much detail as possible. It is especially important for our technician to know if the problem is intermittent. If you want an estimate of cost for out of warranty service, be sure to request it in this note. Be aware that requesting an estimate will delay service to your unit as we will have to contact you for your approval before commencing service.

Registering The Warranty

Please return the enclosed card to the factory within 30 days of purchase to register the warranty.

Installation

The first step in preparing your SE-MKI preamplifier for use is to install the vacuum-tubes. To do this, remove the top plate of the machine by removing these screws securing on the top plate. The SE-MKI uses eight type 6H1-EB tubes it's similar 6922 tubes. After checking the pin orientation, insert one tube in each tube socket. Next, fit two of the included silicone rubber rings over each tube, spaced at roughly 1/3 and 2/3 distances. These rings will minimize the effects of air-borne microphonics on the tubes. Finally, reinstall the top plate of the machine.

Set up

To maintain proper ventilation, mount the SE-MKI horizontally on a flat, hard surface, and take care that the ventilation holes in the bottom are unobstructed. Allow at least two inches of clearance above the unit and keep the cabinet or shelf open at the back. Vertical installation is not recommended.

All SE-MKI sold in the United States are configured for operation on a 60Hz ac power line producing between 100 and 120 volts. Export versions of the SE-MKI will have the correct operating voltage and frequency clearly marked on the back panel of the unit, near the ac power cord. In all cases, the actual line voltage should be within + 5/-10% of the nominal rated voltage.

Electromagnetic Interference

Considerable care has been taken in the design of the SE-MKI to minimize its susceptibility to radio frequency interference and other forms of EMI. Choice of materials, physical layout, grounding practice, and power supply design have all been specified with a view to reducing the impact of electromagnetic fields on the performance of this unit. At the same time, however, our primary goal is the accurate reproduction of recorded music in the normal home environment, and we have elected not to compromise this objective by the application of heavy-handed RFI filters, or by using grounding practices that reduce RFI at the expense of degraded audio performance. We find that the approach we have taken has worked extremely well, resulting in only rare instances of EMI problems which could be treated locally as needed, rather than compromising the performance of our product in the 99.9% of installations where EMI is not a problem.

Care in installation can often avoid EMI induced problems. The following practices should generally be observed in any application, and will be especially important where EMI may be a problem.

Interconnect cables should be kept as short as possible (3 meters or less), and shielded cable should be used (cable which has two center conductors, and a separate external shield connected at only one end).

Physical location and cable "dress" can be an important factor in minimizing hum pickup. The installation should situate the preamplifier well away from the power amplifier, and power (ac mains) cords should be dressed to remain at least 4" (100mm) away from input/output cables.

Connecting The SE-MKI To Your System

The SE-MKI should be connected to the AC Line using the supplied power cord by inserting it into the rear panel IEC power socket. You may also choose to use a premium grade power cord such as the Navison audio Power Cord.

NOTE: Ensure that your SE-MKI is configured for the proper AC Line voltage in your area. If in doubt, refer to a qualified service technician.

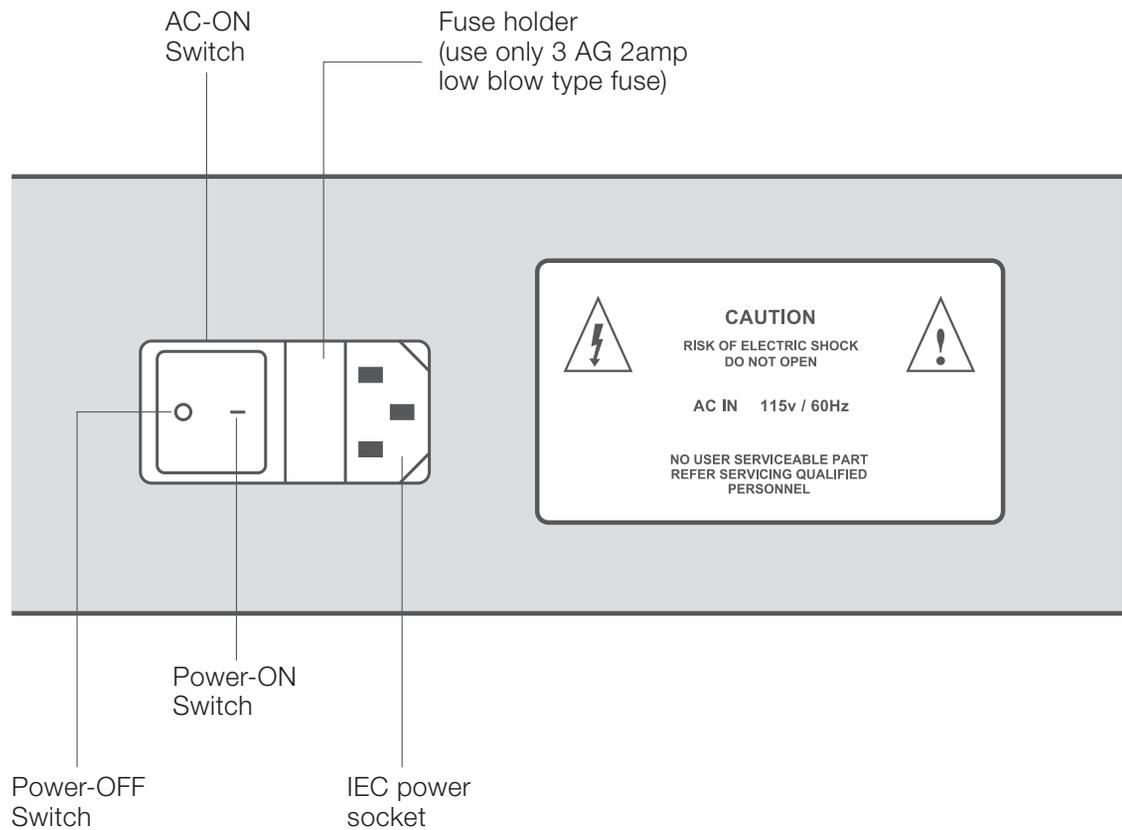
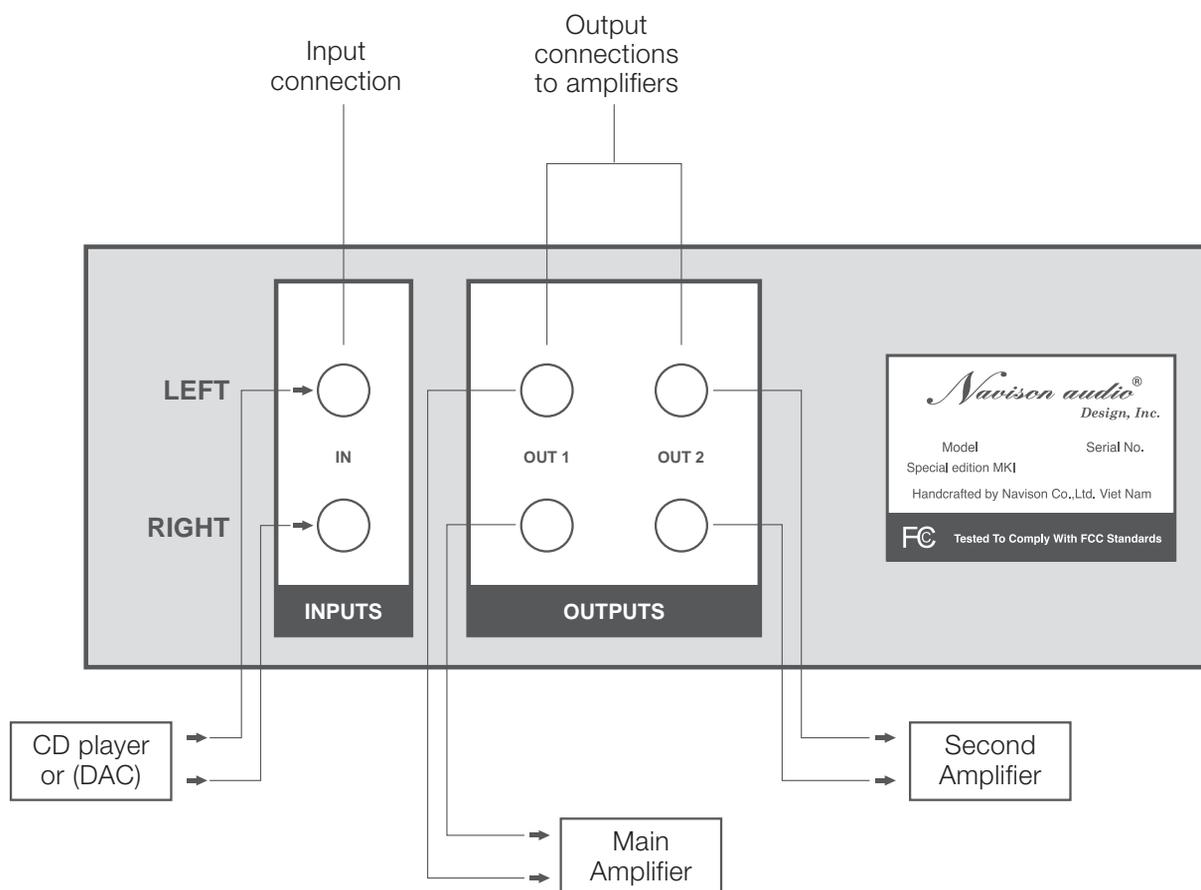


FIGURE 1 – REAR PANEL DIAGRAM

FIGURE 2 – REAR PANEL INPUT/OUTPUT DIAGRAM



Input and output connections

Refer to Figure 2 - Rear Panel Diagram during the following operations.

The SE-MKI is designed to serve as a flexible control center for your music system with extensive input and output connection capabilities. Input and output connections include the following:

Outputs : OUT 1 to main amplifier
OUT 2 to second amplifier

Input : IN from compact disc player or digital audio converter (DAC)

Operating Your SE-MKI

Refer to Figure 3 - Front Panel Diagram and Figure 1 - Rear Panel Diagram during the following operations.

Powering up

1. Make sure that the LEVEL control is fully off (in the fully counter-clockwise position). CAUTION; This precision level control switch and all other controls on your SE-MKI require a minimum effort to adjust. NEVER FORCE ANY OF THE CONTROLS.
2. Energize your SE-MKI by pushing the POWER switch button next IEC power socket. When the unit is energized, power indicator led will light in red, the preamp will become operative only after 90 seconds of warm up, the mute indicator led will light in green color NOTE: There is a delay of approximately 90 seconds before the audio output signal is available for listening.

Setting volume level

The Volume is controlled by a custom-made 24-position gold contact stereo level attenuator switch, with 2 dB steps.

Assuming that your input source is playing, slowly increase the LEVEL knob to the desired volume. Actual listening volume will depend on all other associated equipment used in your audio system.

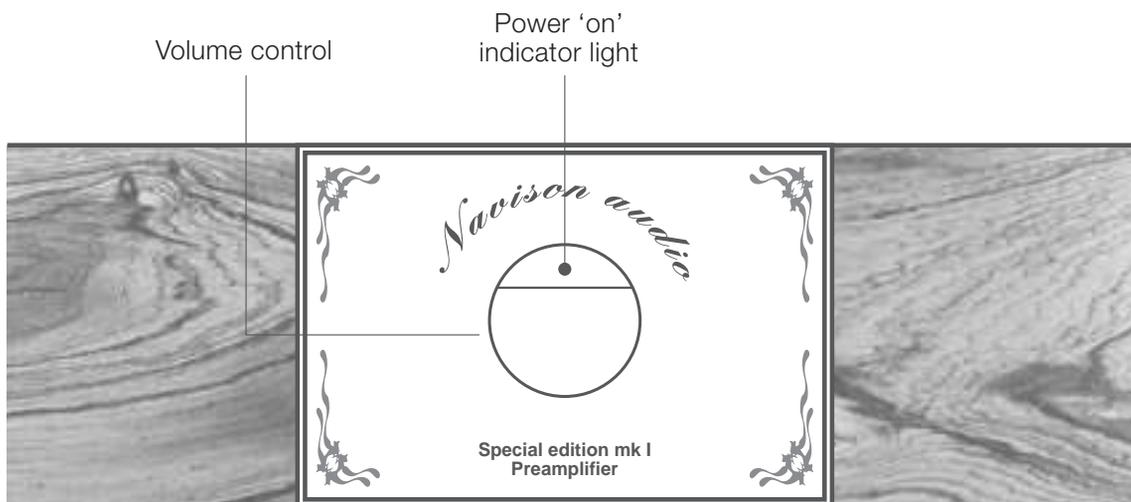


FIGURE 3 – FRONT PANEL INPUT/OUTPUT DIAGRAM

Getting The Most From Your SE-MKI

In a system of commensurate high quality components, the Navison audio SE-MKI offers an unparalleled level of sophistication and refinement in music reproduction. To get the best performance out of any audio system, there are a number of important details which must be attended to.

Absolute Phase

Musical notes are heard through the ear's response to waves of alternating rise and fall of air pressure. Musical transients are almost exclusively positive: that is, the initial effect is a rise in pressure. The ear is capable of distinguishing these positive transients from the musically unnatural alternative of a negative transient (an initial fall in air pressure). In terms of your stereo system, these transients are created by your loudspeakers. If the speakers respond to musical transients by first moving out, they are creating a rise in pressure, and the system is said to be phase correct. If they respond by moving in, they create a fall in pressure and the system is said to be phase inverting. Each component in the stereo system either preserves the phase of the incoming signal, and is said to be phase correct, or inverts the phase and is said to be phase inverting. It is unimportant whether an individual component is phase correct or phase inverting, as long as the system as a whole is phase correct. This will be the case if the number of phase inversions is even (or zero).

The SE-MKI is phase inverting. If your system has an odd number of inversions, (for example, if the SE-MKI is the only phase inverting unit in the chain) then you must add one phase inversion. This is conveniently done by reversing the positive and negative connections to your speakers (be sure to reverse both channels).

If you are not sure about the phase of every piece in your system, you can establish correct absolute phase by careful listening. When the system is in correct phase, transients will be noticeably cleaner and more sharply defined. The effect is especially apparent on plucked string sounds. A final warning - not all recordings are phase correct (including some "audiophile" recordings), so listen to several before concluding your investigation of absolute phase.

The Importance Of Wires

Interconnect and speaker wires are an important element in your stereo system. Interconnects are available which will permit a reference quality system to blossom and fulfill its promise of musical reality. Others will strangle the system to the point where it becomes little better than average. To complicate matters, our experience suggests that the choice of interconnects will be system dependent - those that are top ranked on one system may be a poor choice for a different system. Consult your Navison audio dealer for recommendations for your specific system.

Performance Tip

Warm up the SE-MKI before listening: The sonic performance of the SE-MKI improves noticeably as the unit warms up. The midrange becomes more lucid, the highs smoother, and the soundstage expands. The warm up period can be expected to last about fifteen minutes.

Questions: If you have questions about the installation or function of your SE-MKI do not hesitate to call Customer Service at 408-269-6800.

Vacuum Tube Replacement

The SE-MKI circuit employs eight vacuum tubes (V1 - V8), all 6H1-EB tubes. The 6H1-EB offers low noise, low microphonics. The brands of tubes we supply have been chosen by first selecting those brands which are known to be most reliable, then by extensive auditioning of these acceptable brands with the final choices being made solely on the basis of sonic performance. We know of no vacuum tubes available which will improve the sonic performance of your SE-MKI. The tubes in your preamplifier have been tempered by a controlled burn-in procedure that permits them to perform for a greatly extended period without sonic degradation, and then selected for minimum residual noise. Replacement tubes are prepared and selected in the same way. Therefore, we highly recommend that you purchase replacement tube sets from Navison audio design.

We anticipate tube life to accommodate two to three years of operation without degradation in normal use - if the preamplifier is switched off when not in use. If the preamplifier is left on at all times, tube life can be exhausted in a matter of a few months.

Specifications

GAIN	: 24.5dB
MAXIMUM OUTPUT	: 15V
FREQUENCY RESPONSE	: 2Hz to 25KHz (- 2dB at 25KHz)
NOISE - UNWEIGHTED	: - 80dB
DISTORTION AT 1.0 V OUTPUT	: Less than 0.2% THD
PHASE	: Inverts
INPUT IMPEDANCE	: Approx. 50K ohms
OUTPUT IMPEDANCE	: Less than 1.8K ohms
POWER REQUIREMENTS	: 115V / 50-60Hz

Internally adjustable by qualified technician to operate on 230V / 50-60Hz

POWER CONSUMPTION	: Approx. 70 watts
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MECHANICAL

DIMENSIONS	: 14,5"D x 21,96"W x 3,84"H
NET WEIGHT	: 33 Lbs total

Specifications are subject to change without notice

FUSES

The SE-MKI has two fuses, they are located on the fuse holder next IEC power socket at the back of the chassis.

If configured for 100 to 120V : Set for 2 amp, slow blow

If configured for 220 to 240V : Set for 1 amp, slow blow

FC THIS PRODUCT COMPLIES WITH FCC STANDARDS

Thank you for selecting the **NAVISON AUDIO**
products for your audio system.

www.navisonaudio.com