

SOLID STATE STEREO AMPLIFIER

Model KTX-4000V



HILBERINK
Electronics-Acoustics
~~de Hilberink~~
~~P.O. Box 4217~~
~~6200 WB MAASTRICHT~~
The Netherlands

OPERATING INSTRUCTIONS

SOLID-STATE STEREO AMPLIFIER

Newly designed, all silicon transistor Hi-Fi Stereo Amplifier KTX series are all with complemental circuitry. 6 Watt (rms) for KTX-1200V, 15 Watt (rms) for KTX-2000V and 25 Watt (rms) for KTX-4000V per channel at 8 ohms load can be obtained. These amplifiers are designed to gain the best functioning when used in combination with the KTX-1000T FM/AM Stereo Multiplex Tuner.

SPECIFICATIONS

OUTPUT POWER:	25W per channel 8 ohm
HARMONIC DISTORTION:	less than 2%
FREQUENCY RESPONSE:	25 – 40,000Hz \pm 2dB
INPUT SENSITIVITY:	
MAG:	3mV
CER:	400mV
TUNER:	150mV
AUX:	150mV
EQUALIZER:	RIAA
S/N RATIO:	more than 50dB
CROSS TALK:	more than 45dB
OUTPUT IMPEDANCE:	4 – 16 ohm (std. 8 ohm)
TAPE OUTPUT:	50mV at R 47K ohm
TONE CONTROLS:	
BASS:	100Hz \pm 10dB
TREBLE:	10,000Hz \pm 10dB
POWER SUPPLY:	AC117/250V, 50/60Hz
SEMI CONDUCTORS:	22 Silicon transistor 4 varistor 8 Silicon diodes
DIMENSIONS:	350W x 200 x 110Hm/m
WEIGHT:	4.05 kg

These amplifiers feature the following:

1. Reproduction with minimized distortion and high damping effects due to its OTL (output transformerless) circuitry.
2. Instant on, no warm-up time required because of transistorized.
3. It is designed for use with magnetic, ceramic and crystal cartridge.
4. Simultaneous balancing both channels with "BALANCE" control.
5. Independent tone control devices, "TREBLE" and "BASS", meaning easy tone adjustment to users' taste and listening conditions.
6. Less power consumption and heat generation as solid state circuitry.
7. Furnished with tape recorder output terminal that enable to tape record from any sources like tape head, tuner or record player.

CAUTION

1. Avoid placing the unit directly in the sun, or heated area.
2. Do not allow the surrounding temperature to arise over 122 degree F.
3. Make sure that there should always be proper air space above and behind the unit. Do not directly place anything on or near to the unit. Such cautions will enable you to enjoy years of care free operation.
4. Do not short circuit speaker output terminals. The unit is designed so that short circuit may not directly result in damage but still care must be take on the part of users.

OPERATION

Prior to operation of the amplifier whatever the sound source to be connected, connections must first be made to speakers. The amplifier is designed for stereo reproduction and two speaker systems are needed for its operation. For connections, follow the instructions given below while referring to the CONNECTION DIAGRAM.

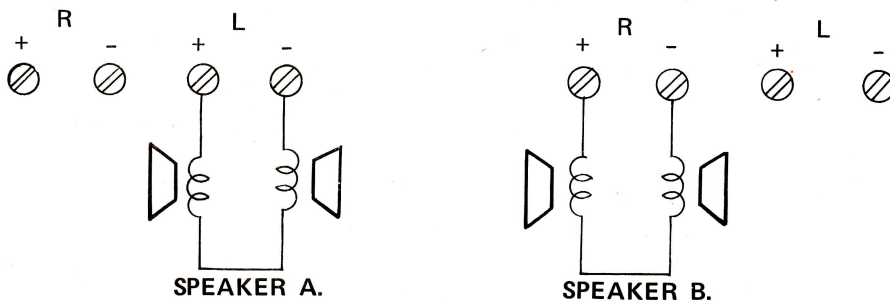
SPEAKER CONNECTION

1. Connect the lead of the left speaker to + and - terminals, marked "L-CH SPKR".
2. Connect the lead of the right speaker to + and - terminals, marked "R-CH SPKR".

Noté: Make sure that the polarity of speaker systems terminals corresponds properly to those of the amplifier. Most speaker systems indicate terminals by + and - or other with for polarity. The amplifier is designed for 8 ohm output impedance so that it reproduces best sound when connected to speaker systems rated for 8 ohm impedance. However, it works satisfactory on those speaker systems rated for 4 ohm to 16 ohm.

When four speaker systems for KTX-1200V or KTX-2000V are required, attention should be given to the following points: * KTX-4000V is provided with such speaker selector switch.

- a) "L" and "R" of speaker terminals (A & B) are respectively connected in parallel.
- b) When using 8 ohm rated speakers for "L" and "R", connect them with either A or B speaker terminals.
- c) Follow the figure shown below when connecting four 8 ohm speaker systems.



- d) If speakers other than 8 ohm are connected, it is advised to put 8- 16 ohms load on each channel.

PROVISIONS

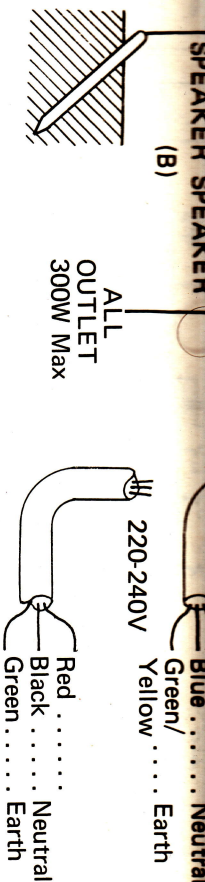
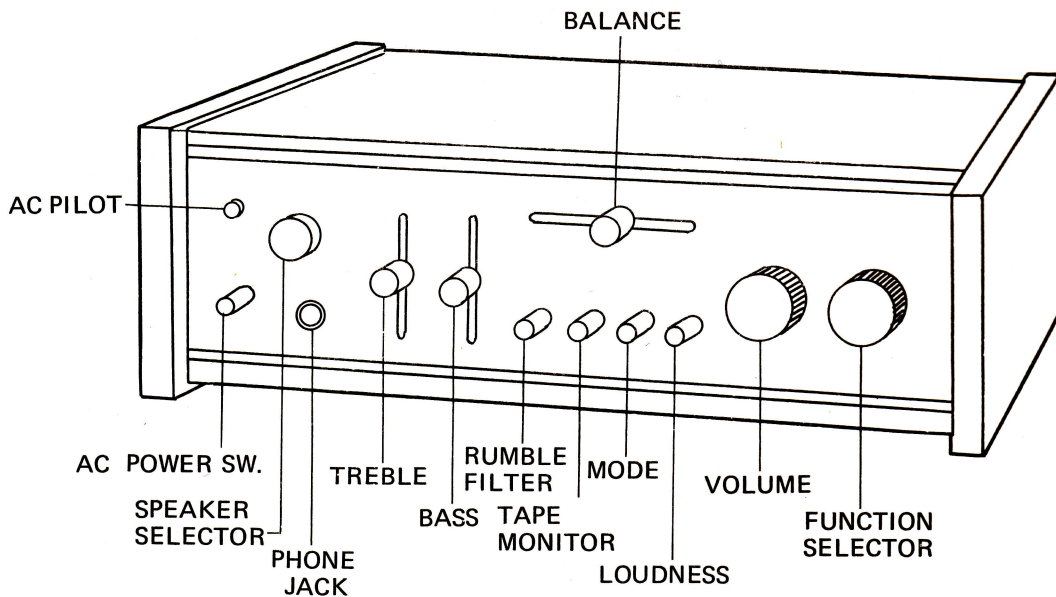
"AC FUSE" The blown fuse here stops the entire functioning, and check to see the cause for it before replacement of the fuse, which must be rated for 1A.

"PROTECTION FUSE" ... Each channel on the unit is protected with **"PROTECTION"** fuses which are provided inside the unit, both rated (see below *), by protecting power transistors. When the speaker output terminals are left short-circuited for a long time by mistake, the protection fuses may be blown, thus protecting power transistors from damage by rush current.

Note: Transistorized amplifiers start functioning immediately after switched on, and rush current may sometimes break the fuse. Even so, it does not mean a damage of the unit. This is more frequent when signal is on the amplifier input, with volume control set to its maximum and switched on.

- * 1.0A for KTX-1200V
- * 1.5A for KTX-2000V
- * 2.0A for KTX-4000V

"UNSWITCHED 200W" ... This is provided for connection with record player, tuner or tape recorder. Designed unswitched, it is always hot with your alternating current (A.C.).



CONNECTION DIAGRAM
FOR
MODEL KTX-4000V

