

SOLID STATE

CHICAGO

25 WATT STEREO AMPLIFIER



HILBERINK
Electronics-Acoustics
P.O. Box 4217
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The Netherlands

OPERATING MANUAL

SPECIFICATIONS

OUTPUT PEAK POWER : 25Watts
OUTPUT IHF MUSIC POWER : 18Watts
FREQUENCY RESPONSE : 30 - 30,000 cps \pm 2db
OUTPUT IMPEDANCE : 4 to 16 OHM (O. T. L. CIRCUIT)
HARMONIC DISTORTION : Less than 1% at listening level
INPUT SENSITIVITY : MAG 3mV CER 300mV
TUNER 250mV AUX. 250mV
HUM AND NOISE : More than 50 db (MAG.)
More than 60 db (AUX.)
CROSS TALK : More than - 45db
SELECTOR SWITCH : Phono, Tuner, Aux.
STEREO-MONO SWITCH : Stereo Monaural
A.C. RECEPTACLE : Unswitched for changer or accessory
TRANSISTORS : 12 Transistors, 2 silicon diodes
SIZE : 10" (L) \times 4-1/2" (H) \times 8" (D)
WEIGHT : 9 lbs.

5. POWER switch

This is provided for switching amplifier on and off. When in "ON" position, the red lamp on the front panel lights up. When switched off, the lamp turns out and the amplifier stops operating.

6. PHONO INPUT SELECTOR switch (Rear panel)

You will find abbreviations "CER" above, and "MAG" below the switch on the rear panel. When using record player with ceramic or crystal cartridge, set the knob to "CER" position, and when using magnetic cartridge to "MAG" position. Note: This switch functions only when using record player with SELECTOR switch set to "PHONO" position. Be careful to select MAG or CER. properly. Any mismatch will reduce amplifier performance considerably.

ACCESSORY

A. C. Receptacle:

This is a socket provided for using player or tuner. It is "UNSWITCHED" and 117 volt A. C. is always present here.

A. C. Line Fuse:

When this fuse is opened, the amplifier stops operating. However, do not replace this fuse before checking the cause for the broken fuse. Replacement must be same type as 1A fuse.

Low Voltage Fuse:

Provided for protection of power transistors. This fuse may open, if Output (speaker) terminal is short circuited by error or accident, thus preventing high current from flowing into power transistors. The transistors used for this amplifier allow for some over-loading, and consideration is made to radiation. If this fuse opens, replace it with same type.

Note: Switching the amplifier on when the volume control is set at maximum may cause the instant surge of current to open the fuse. When this occurs simply replace the fuse and your amplifier is ready for playing.

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IMPORTANT

Care must be taken on the following points:

1. Be certain that its environmental temperature is not higher than 50 degrees C. or 122 degrees F.
2. Do not place directly in the sun.
3. Do not place objects on the amplifier or closely around it. Allow sufficient ventilation.
4. Be careful not to short circuit the output speaker terminals.

INSTALLATION

This amplifier hardly produces internal temperature because of the transistorized circuit, but as is mentioned in the IMPORTANT section, its location must be selected with utmost attention.

CONNECTING LOUDSPEAKERS

This amplifier is designed for stereo sound reproduction and two speaker systems are required for its operation. For connections, follow the instructions below: —

1. Connect lead wire of the Left speaker to the + and — terminals marked "SPEAKERS".
2. Connect lead wire of the Right speaker to the + and — terminals marked "SPEAKERS".

Note: + and — terminals of speaker system is connected to corresponding + and — terminals of the amplifier. Most speaker systems indicate terminals by + and — or otherwise for polarity. This amplifier is designed for eight (8) ohm output impedance and therefore, best reproduction is obtained when speaker systems with the same impedance are used.

However, there is an allowance on the amplifier for use with speaker systems having an impedance range of four (4) to sixteen (16) ohms.

CONNECTING RECORD PLAYER

You can use this amplifier with stereo record player of your choice, if it is provided with magnetic, ceramic or crystal cartridge. You will find, on the player, two shielded cables with pin-plugs on the ends.

Connections with record player are made in the following manner:

1. Player with magnetic cartridge

Plug the left cable of the player into jack marked "L-CH. MAG": right cable into "R-CH. MAG".

2. Player with ceramic or crystal cartal cartridge

Plug the left cable of the player into the jack marked "L-CH.CER": the right cable into "R-CH. CER".

CONNECTING TUNER

This amplifier is provided with two tuner input jacks for use with tuner (AM or FM). However, if the tuner is monaural, only one of the two is used. First, use shielded cable (patch cord) provided with pin-plugs on each end. With this cable, connect the tuner output jack to the "L-CH" or "R-CH" input of the amplifier marked "TUNER". Then, set the SELECTOR knob to TUNER, and STEREO-MONO switch to MONO, both speaker systems will reproduce the program. For use with FM Multiplex tuner, use two shielded cables. Connect the left output jack of the tuner to the left TUNER INPUT of the amplifier with the shielded cable, and the right output jack to the right TUNER INPUT jack of the amplifier with the second cable.

Then, set the SELECTOR knob of the amplifier to TUNER, and STEREO-MONO switch to STEREO, for multiplex stereo broadcast reception.

CONTROLS

1. SELECTOR switch

PHONO: The position to which the knob is set for record-listening.

TUNER: The position to which the knob is set for broadcast-listening.

AUX: The position to which the knob is set for use of program material other than record player or tuner.

2. STEREO-MONO switch

STEREO: The position to which the knob is set for listening to stereo record or multiplex stereo broadcasts.

MON: The position to which the knob is set for listening to monaural record or Stereo programs can be listened to monaurally when this switch is in this position.

3. VOLUME control (LEFT and RIGHT channels)

This control is provided to adjust volume on each channel. To obtain best listening results when listening to stereo records or broadcasts, adjust control so that each speaker produces equal volume.

4. TONE control (LEFT and RIGHT channel)

This control is provided to adjust tone quality to listener's preference of both the left and right channels.