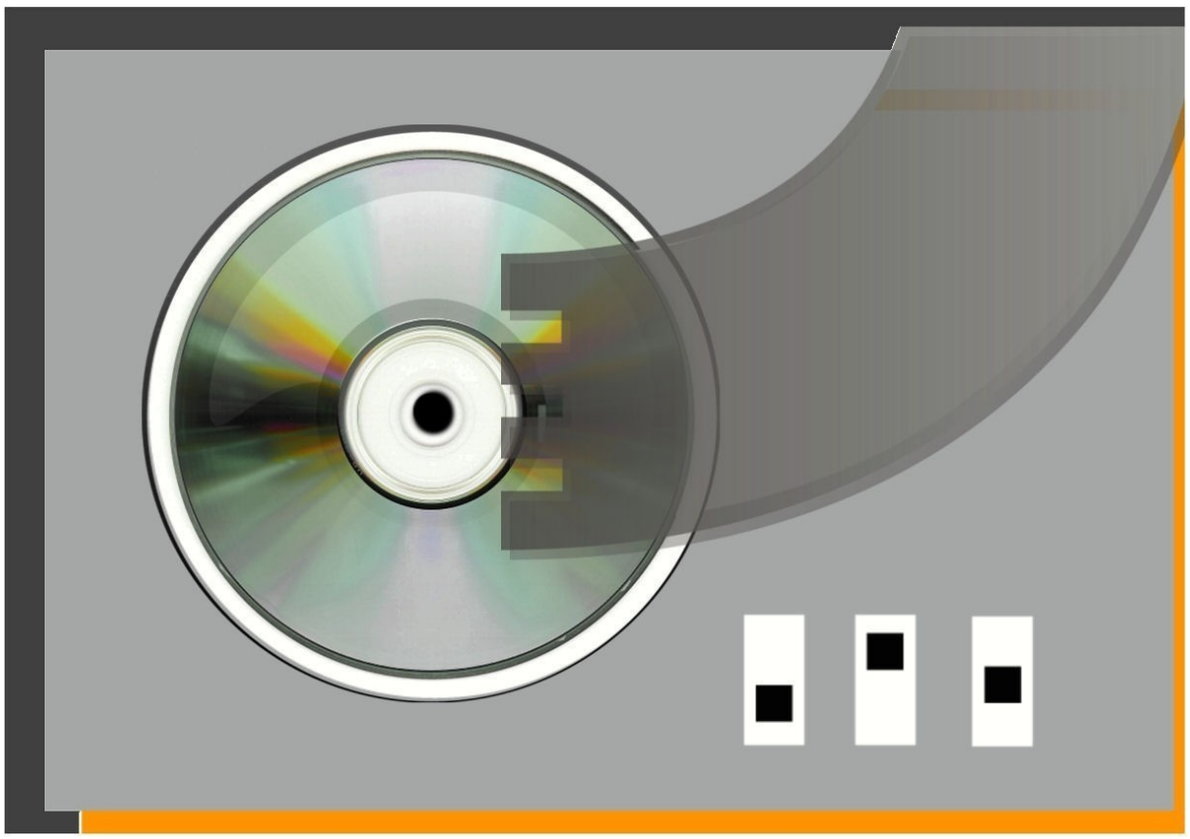
VINTAGE-AUDIO laser



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INSTRUCTION MANUAL

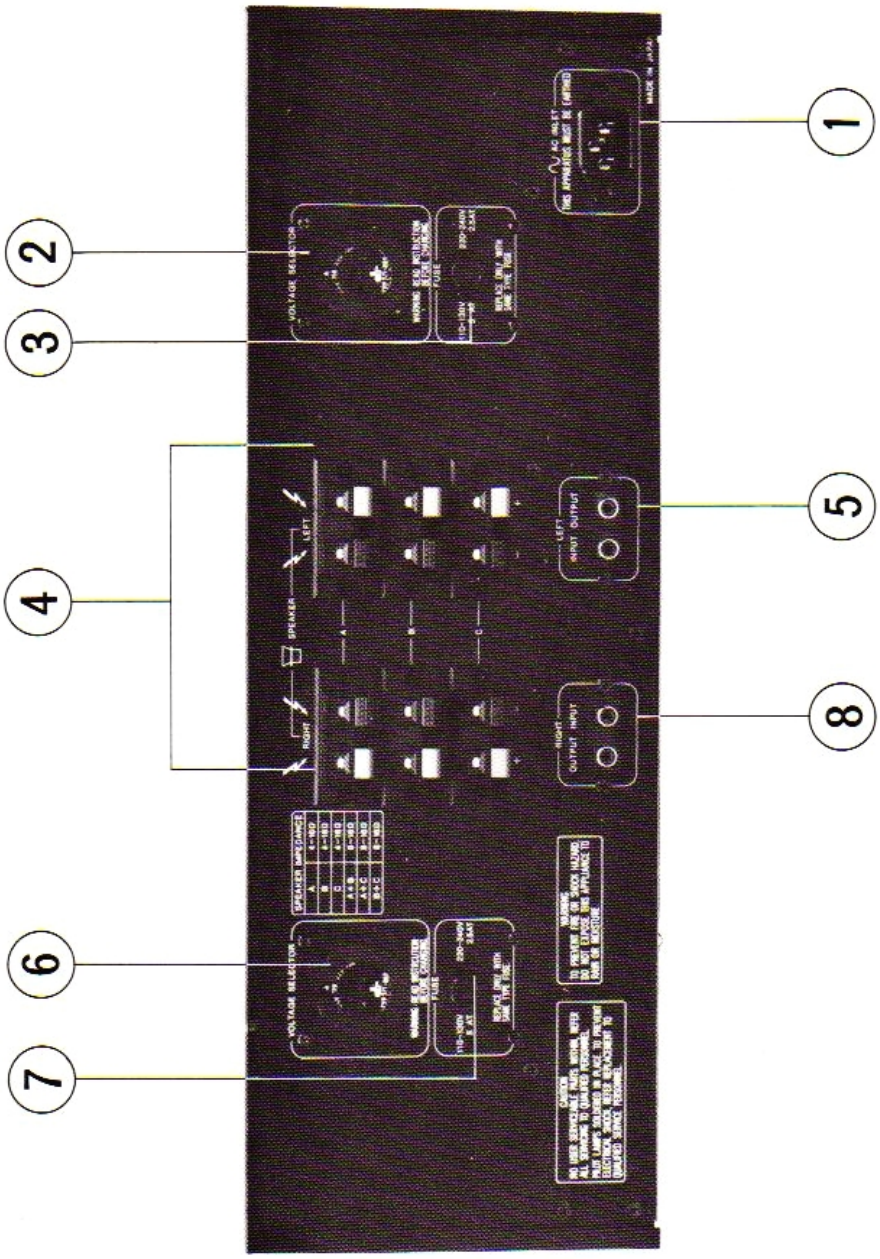
BS 5500

SETTON

TOWARDS PERFECTION

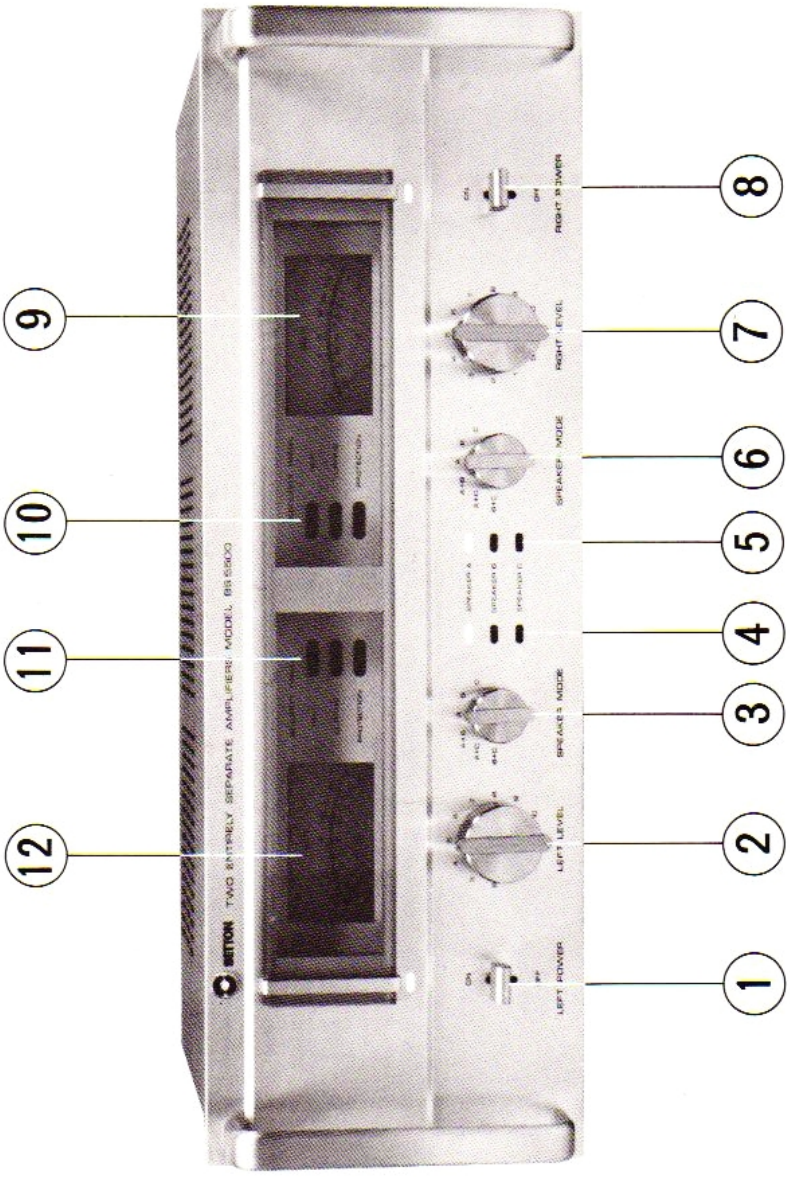
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REAR PANEL



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FRONT PANEL



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Two Entirely Separate Amplifier BS-5500

Features

- Direct coupled OCL power amplifier using parallel output transistor stage.
- Output terminals for 3 sets of speakers.
- Two large meters are used for output power indication.
- Electrically controlled protection circuit with a relay.
- 2 security panels (clipping indicator for power amplifier, overheat of the heat sink and protection indicator).
- Controls:
  2 level controls; 2 power source switches; 2 speaker mode switches.
- Terminals:
  Input terminals; terminals for 3 set of speakers.

General Information

Solid State Device	IC: 2 Dual-transistor: 2 Transistor: 48 Diode: 40
Power Requirement	110/130/220 or 240 volts, switchable, 50 – 60 Hz AC.
Power Consumption	600 watts [max., 4 ohms] 300 watts [UL rating] 350 watts [CSA rating]
Dimensions	500 (W) x 164 (H) x 295 (D) mm, without legs and protrusions. (20" x 6.5" x 12")
Weight	18 kgs. [39.6 lbs.]

Technical Specifications

Power Output	100 watts per channel, at 8 ohms, RMS, at 20 Hz – 20 kHz, 0.05 % T.H.D.
Total Harmonic Distortion	0.05 % at rated output
Intermodulation Distortion	0.05 % at rated output
Frequency Response	10 Hz – 80 kHz, +0, –1 dB
Input Sensitivity (for rated output)	1 volt
Power Bandwidth	5 Hz – 40 kHz
Damping Factor	40, at 1 kHz, 8 ohms
Hum and Noise (IHF, short-circuitd "A" network)	110 dB

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Front Panel Controls and Indicators

BS-5500 has 6 controls and 16 indicators on the front panel.

[1] **Left Channel Power Switch and Lamp:** This switch turns the left channel power on and illuminates the Power Lamp.

[2] **Left Channel Level Control:** This permits the adjustment of input level for left channel. Clockwise rotation increases the input level and counterclockwise rotation decreases it.

[3] **Left Channel Speaker Mode Switch:**

B + C: This connects the left channel sound output simultaneously to the speakers attached to the B SPEAKERS and C SPEAKERS output terminals.

A + C: This connects the left channel sound output simultaneously to the speakers attached to the A SPEAKERS and C SPEAKERS output terminals.

A + B: This connects the left channel sound output simultaneously to the speakers attached to the A SPEAKERS and B SPEAKERS output terminals.

A: This connects the left channel sound output to the two speakers attached to the A SPEAKERS output terminals.

B: This connects the left channel sound output to the two speakers attached to the B SPEAKERS output terminals.

C: This connects the left channel sound output to the two speakers attached to the C SPEAKERS output terminals.

[4] **Left Channel Mode Indicator:** These light up thus indicating the left channel sound output is being connected to the appropriate speakers.

[5] **Right channel Mode Indicator:** These light up thus indicating the right channel sound output is being connected to the appropriate speakers.

[6] **Right Channel Speaker Mode Switch:**

B + C: This connects the right channel sound output simultaneously to the speakers attached to the B SPEAKERS and C SPEAKERS output terminals.

A + C: This connects the right channel sound output simultaneously to the speakers attached to the A SPEAKERS and C SPEAKERS output terminals.

A + B: This connects the right channel sound output simultaneously to the speakers attached to the A SPEAKERS and B SPEAKERS.

A: This connects the right channel sound output to the two speakers attached to the A SPEAKERS output terminals.

B: This connects the right channel sound output to the two speakers attached to the B SPEAKERS output terminals.

C: This connects the right channel sound output to the two speakers attached to the C SPEAKERS output terminals.

[7] **Right Channel Level Control:** This permits the adjustment of input level for right channel. Clockwise rotation increases the input level and counterclockwise rotation decreases it.

[8] **Right Channel Power Switch and Lamp:** This switch turns the right channel power on and illuminates the Power Lamp.

[9] **Right Channel Meter:** Right channel power output can be read directly on this meter in wattages or decibells.

[10] **Right Channel Security Panel:** This amplifier is protected by a unique built-in protection circuit which consists of the HEAT indicator, CLIPPING indicator and PROTECTION indicator.

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A. HEAT INDICATOR: This indicator alerts you to an unusually high temperature rising inside of the amplifier. When this orange light is activated, you should stop operating the receiver immediately until the speaker connections or other problem is corrected.

B. CLIPPING INDICATOR: This indicator alerts you to amplifier saturation owing to the input signal level for the right channel being too high.
When this light is activated, you should decrease the sound output from the speaker by rotating the Right Channel Level Control to the position at which the CLIPPING indicator does not light up. If the right channel level is left at too high level, all 3 lights will activate and the amplifier will be shut down.

C. PROTECTION INDICATOR: This orange light is a warning indicator which is activated when the speaker cable is short-circuited. When this lamp is activated, you should stop operating the amplifier and turn the power off until the speaker connections or problem is securely corrected. The protection circuit also is activated when the HEAT indicator light glows brightly.

NOTE: When the amplifier is first switched on, there will be approximate 5 seconds lighting up of those indicators before sound is heard from the speaker, however, this is normal operation.

[11] **Left Channel Security Panel:** These indicators operate in the same manner as the Right Channel Security Panel indicators except they provides the Left Channel Security Panel indication.

[12] **Left Channel Meter:** Left channel power output can be read directly on this meter in wattages or decibells.

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Rear Panel Connectors and Controls

[1] **AC Power Socket:** This accepts AC power cord supplied with the amplifier for AC power supply connection. Before inserting the AC power cord to any AC outlet, read the Voltage Selector (left and right channels) section carefully.

[2] **Left Channel Voltage Selector:** This switch, behind the protecting plate, changes the AC power input voltage to the left channel amplifier. It is extremely important to decide the Left Channel Voltage Selector setting to a correct value depending on the voltage supplied to your house AC outlet, 110, 130, 220, or 240 volts. If you can not determine the setting, consult with your dealer from which you purchased the amplifier.

[3] **Left Channel Fuse:** Provides the protection of the left channel amplifier in the event of a malfunction of the unit. When replacing, replace with only same type fuse as specified, if your house AC outlet supplies 110 or 130 volts, use 5 AT, and if 220 or 240 volts, use 2.5 AT.

[4] **Left & Right Speaker Output Terminals:** The amplifiers have been equipped with three sets of speaker output terminals, Speakers A, B, and C.
Press the red lever on the terminal and insert the bared section of speaker leads from the positive [+] terminal of the speaker; and press the black lever and insert the bared section of speaker leads from the negative terminal [−] of the speaker, into the openings.

Speakers A: When using only one set of speakers, simply connect the two speakers to the left and right speaker terminals of Speakers A.

Speakers B: The second set of speakers, if employed for an extension use in the remote location, must be connected to the left and right speaker terminals of Speakers B.

Speakers C: The third set of speakers, also if employed for an extension use in a remote location, must be connected to the left and right speaker terminals of Speakers C.
Note that when more than two sets of speakers are employed, no speaker should have an impedance rated less than 8 ohms.

[5] **Left Channel Input Jack and Passing-Through Output Jack:**

Input: Accepts left channel output of the pre-amplifier using shielded audio cables.

Output: This jack is parallel to the input jack thus delivering the output of the pre-amplifier to the another main-amplifier for the convenience.

[6] **Right Channel Voltage Selector:** This switch, behind the protecting plate, changes the AC power input voltage to the right channel amplifier. For the safety, refer to the Left Channel Voltage Selector [2].

[7] **Right Channel Fuse:** Provides the protection of the right channel amplifier in the event of a malfunction of the unit.
For the safety, refer to the Left Channel Fuse [3].

[8] **Right Channel Input Jack and Passing-Through Output Jack:**

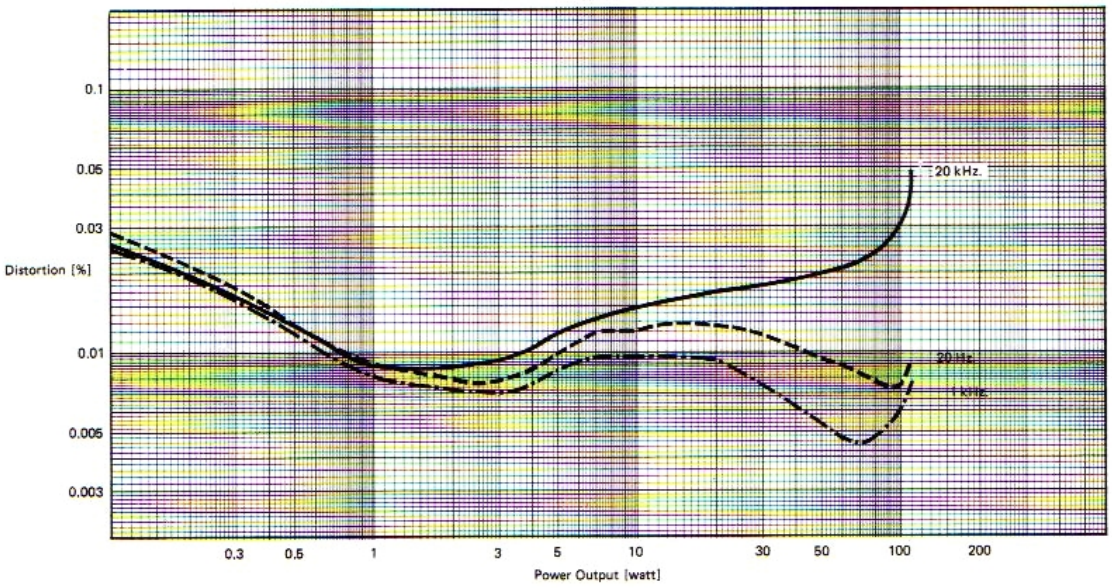
Input: Accepts right channel output of the pre-amplifier using shielded audio cables.

Output: This jack is parallel to the input jack thus delivering the output of the pre-amplifier to the another main-amplifier for the convenience.

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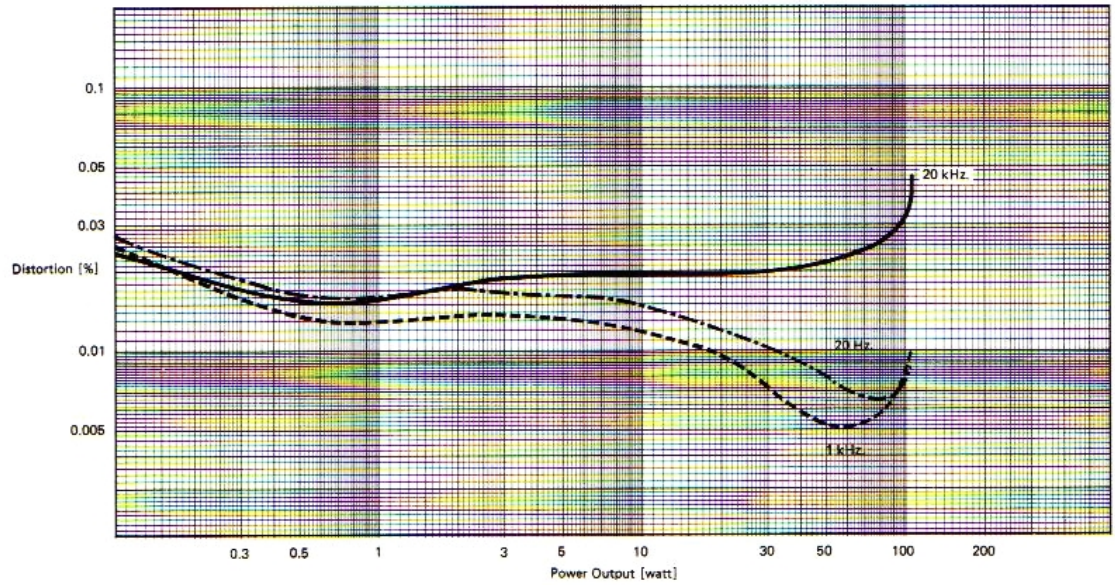
Power Output to Distortion [Channel 1/Left]

Through Main Amp In jacks to Speakers terminals [at 8 ohms].
Volume Control at maximum. Input Level: 1 volt. Damping Factor: 40.
Hum and Noise: 100 dB [not weighted].



Power Output to Distortion [Channel 2/Right]

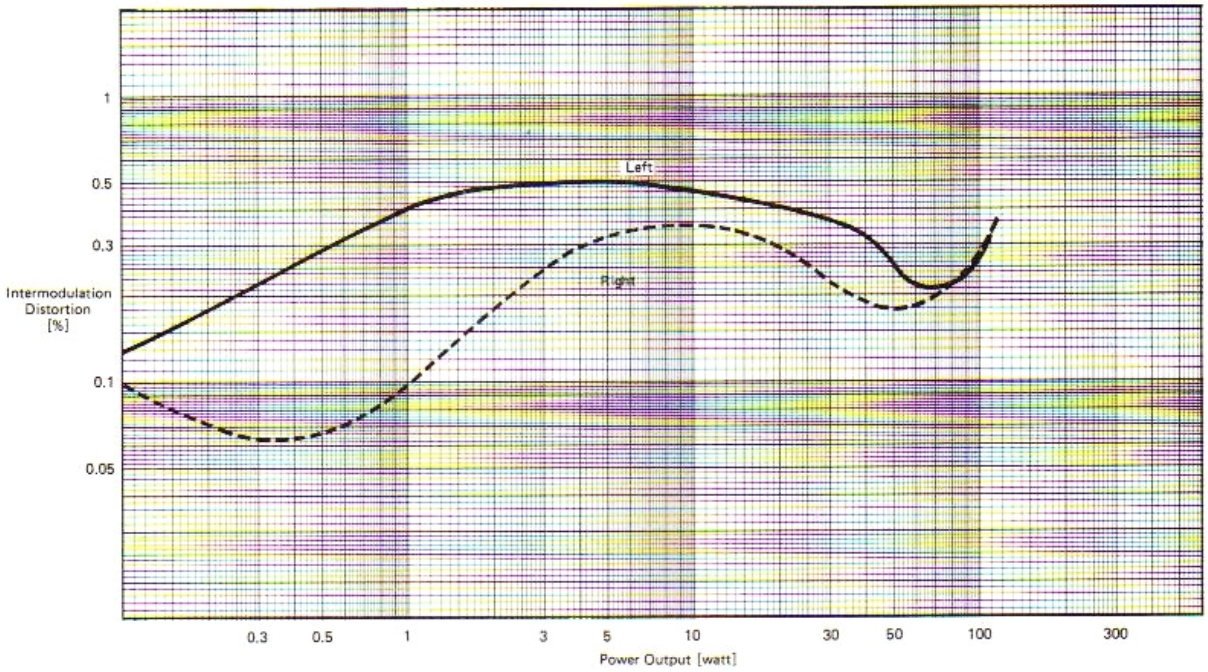
Through Main Amp In jacks to Speakers terminals [at 8 ohms].
Volume Control at maximum. Input Level: 1 volt. Damping Factor: 40.
Hum and Noise: 100 dB [not weighted].



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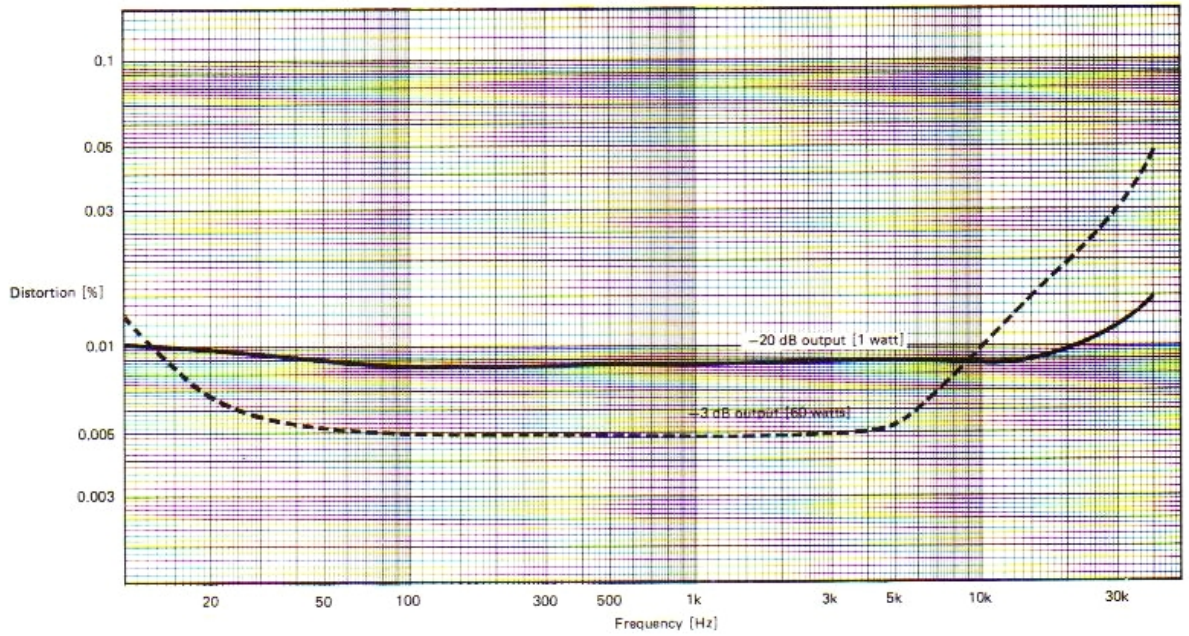
Intermodulation Distortion

Through Main Amp In jacks to Speakers terminals [at 8 ohms].
Each single channel operated. Test input signals: 40 Hz and 7 kHz [4 : 1, respectively].



Frequency to Distortion [Channel 2/Right]

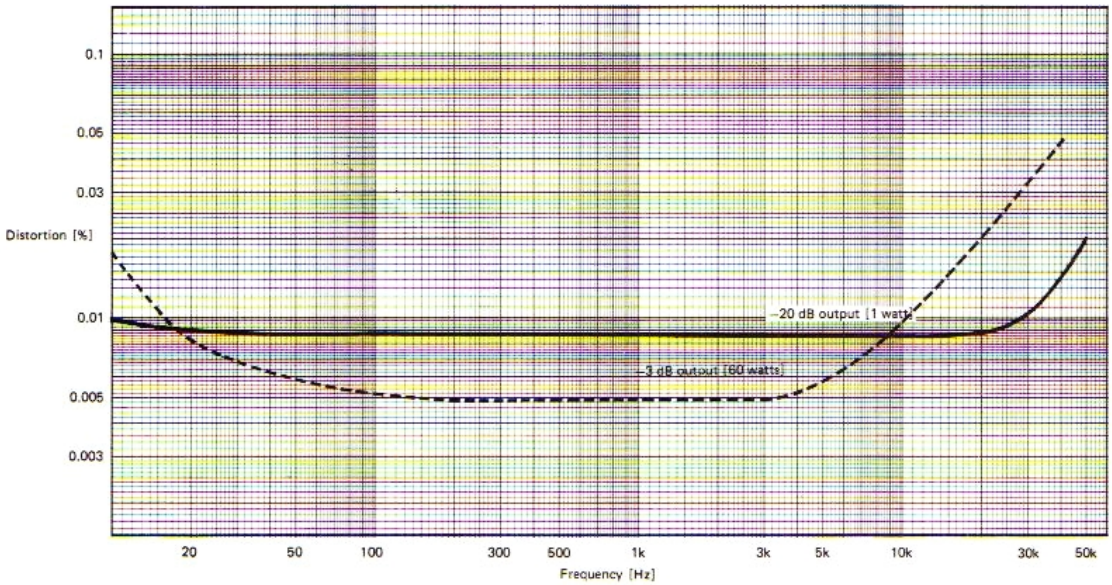
Through Main Amp In jacks to Speakers terminals [at 8 ohms].



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Frequency to Distortion [Channel 1/Left]

Through Main Amp In jacks to Speakers terminals [at 8 ohms].



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