decca/columbia/riaa stereo equalizer amplifier
Model 1000
Technical Description

Phono playback equalization circuits in most preamplifiers are either CR type or NF type. The ZANDEN MODEL1000 uses a fixed impedance circuit called a bridged T circuit. It is constructed from a capacitor, resistors, and an inductor. This method has been used in professional playback systems for years. We firmly believe this method is the most accurate way of playing LP records back.

The MODEL1000 has three phono equalization curves. You can select the RIAA, COLUMBIA, and DECCA curve. There is a mercury rotary switch to make your selections. It was believed at one time that the recording characteristics of all LP records were the unified RIAA curve. The RIAA curve was not unified and other curves were being used by many different recording labels. You will get the best playback balance of stereo LP records with the MODEL1000.

The amplifier section has our original NO-NFB vacuum tube circuit (worldwide PAT). The power supply section is constructed from a tube rectifier and an input-choke. This is done to avoid the switching-noise of the diode. The tube heater supply section has current regulated circuits to stop rush current from happening. It also provides the release of stable thermo-electrons from the tube's cathode.

We chose a PC-board to shorten the ground line and the signal line. The input and the phono equalization curve selection is achieved by using high-reliability miniature relays, which guarantee the long stable performance. Capacitors used in the signal lines are all high quality polypropylene film caps.

We manufacture the coils on an automatic winding machine at our factory. The chassis of the MODEL1000 is constructed of base, front, rear panels of 16m/m thick aluminum plated with gold-color alumite and high-quality chrome-plated. 1.2m/m stainless-steel mirror-finished cover.

<table>
<thead>
<tr>
<th></th>
<th>TURNOVER FREQUENCY (Hz)</th>
<th>ROLLOFF FREQUENCY (kHz)</th>
<th>RECORD LABEL</th>
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</thead>
<tbody>
<tr>
<td>DECCA</td>
<td>125/500</td>
<td>1.59/-16dB (at 10kHz)</td>
<td>DECCA-UK, LONDON, EMI, DEUTSCH-GRAMMOPHON, ARCHIV, ANGEL, IVERTY, POLYDOR, etc.</td>
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<tr>
<td>COLUMBIA</td>
<td>100/500</td>
<td>1.59/-16dB (at 10kHz)</td>
<td>CBS-SONY, COLUMBIA, MARCAS, ATLANTIC, CONTEMPORARY, IMPULSE, PABLO, REPRISE, SAVOY, VERVE, etc.</td>
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<tr>
<td>RIAA</td>
<td>50/500</td>
<td>2.12/-13.7dB (at 10kHz)</td>
<td>RCA, PHILIPS, ERATO, HARMONIA-MUNDI, DECCA-USA, CALLOPE, A&amp;M, WARNER-BROTHERS, etc.</td>
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fig.2 Phono playback equalization frequency & stereo LP record labels

Specifications

Equalization Curve Positions: RIAA, COLUMBIA, DECCA
Inputs: stereo-cartridge ×1 mono-cartridge ×1 (selected by a rotary switch of front panel)
Input Impedances: stereo-cartridge 47KΩ
mono-cartridge LOW/1KΩ, MID/10KΩ, HIGH/47KΩ
Output Impedance: 3KΩ
Gain: 33dB (1kHz, RIAA)
Frequency Deflection: 0.5dB (20Hz~20kHz)
Total Harmonic Distortion: 0.1% @ 300mv RMS output, 1kHz
Signal to Noise: −70dB (IHF-A, 5.0mv RMS)
Channel Balance: 0.5dB maximum
Tube Complement: 6922(SOVTEK) × 4 6CA4 × 1
Dimensions: 398(W) × 103(H) × 254(D)
Weight: 11kg

Specifications subject to change without notice.

The MODEL1000 is backed by One-Year Limited Warranty. Vacuum tubes are warranted against defects for 90 days.