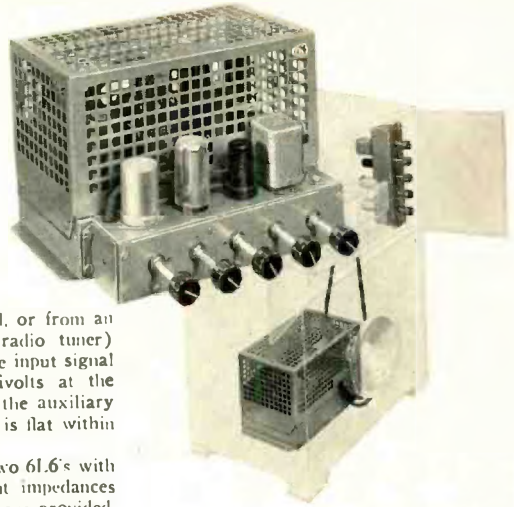


Rauland 1825 High Fidelity Phono Amplifier



INTEREST in commercially available equipment is second only to constructional information in the opinion of many audio enthusiasts, since many users of this apparatus prefer to purchase ready-made standard amplifiers and other devices rather than trying to construct them in their own workshops.

The Rauland 1825 High-Fidelity Phono Amplifier has several unique features which make it especially desirable for the residence installation, and one of these is the method of mounting. As seen in the photograph, the amplifier is a compact and self-contained unit of more or less conventional design with the preamplifier attached to the main chassis. However, the entire preamplifier may be removed and mounted adjacent to a tuner or phono turntable or in any convenient location up to three feet from the main chassis. The control panel can be interchanged with the bottom plate of the preamplifier so that the tubes extend back from the panel and the mounting brackets can be rotated to any position for attachment to the cabinet or panel, as shown.

Performance

Flexible tone controls provide response curves as shown at right, with a 10-db boost or cut at 70 and 10,000 cps. A switch selects inputs from the phonograph preamplifier

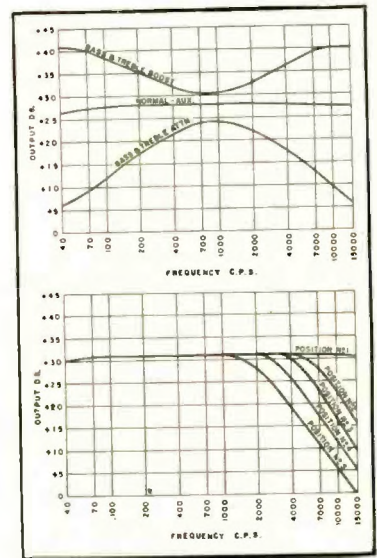
with a gain of 103 db over-all, or from an auxiliary input (such as a radio tuner) with a total gain of 78 db. The input signal for rated output is 2.8 millivolts at the phono input, or 0.21 volts at the auxiliary input, and frequency response is flat within ± 1 db from 37 to 21,000 cps.

The output stage employs two 6L6's with 17 db of feedback, and output impedances of 4, 8, 16, 250, and 500 ohms are provided.

Rated power output is 25 watts, and tests show this to be approximated closely—at five per cent distortion, a measured power output of 22 watts was found at 1000 cps with a line voltage of 114 volts. At 60 cps the output at five per cent distortion was measured at 21.2 watts; at 10,000 cps, 18.6 watts.

Two plug-in equalizers accommodate all types of magnetic pickups, and another is for use with crystal cartridges. The design of these units is such that the same response is obtained with all types of pickups. The cutoff switch provides for flat response, or for a droop of 12 db/octave above each of the four cutoff frequencies.

Distortion remains well below one per cent for average listening levels, and because of its adaptability and comparatively low cost, this amplifier is considered excellently suited for use in home audio systems.



Below: Schematic of Rauland 1825 amplifier. (M in resistor-value listings indicates 1000.) Curves at right, above: Frequency response, and range of tone controls. Lower curves show cutoff frequencies for phonograph reproduction at various positions of the cutoff control.

