

CIRCUITRY

The two identical circuits are essentially similar to previous Leak power amplifiers. Each comprises a 3-stage triple loop feedback amplifier, the main loop applying 26db of negative feedback over the complete amplifier from input to output terminals. A low-noise, high-gain triode feeds into a second-stage, double-triode phase-splitter, which in turn feeds two push-pull output valves (tubes) arranged in the distributed-load condition. Grain-orientated steel is used for the cores of the two output transformers and the mains transformer.

SPECIFICATION

VALVES (Tubes)

3 — ECC83 or B339 or 12AX7.

4 — EL84 or N709 or 6BQ5.

1 — GZ34 or 5AR4.

(International standard types of world-wide availability).

POWER OUTPUT

22 watts r.m.s. maximum (11 watts per channel).

44 watts peak (22 watts per channel).

TOTAL HARMONIC DISTORTION

0.1% for 10 watts r.m.s. output per channel (± 1 db) at 1,000 c/s.

HUM AND NOISE

80db, (± 3 db), below maximum output with a source impedance of 25,000 ohms.

SENSITIVITY

An input of 120mV gives maximum output.

FREQUENCY RESPONSE

± 0.5 db, 20 c/s to 20 kc/s.

DAMPING FACTOR

25, measured at 1,000 c/s.

INPUT IMPEDANCE

1 megohm, plus approximately 5 mmfd.

STABILITY MARGINS

Gain, 10db ± 3 db.

Phase, 20° ± 10 °.

LOUDSPEAKER IMPEDANCES

Loudspeakers of any impedance between 3 ohms and 20 ohms may be used. Adjustable plugs on top of each output transformer select three tappings, nominally 16 ohms, 8 ohms and 4 ohms.

POWER SUPPLY

200 — 250V, 50 — 100 c/s.

or. (alternative model)

100 — 125V, 50 — 100 c/s.

A voltage selector plug is fitted on top of the mains transformer.

CONSUMPTION

105 watts (110 watts with Leak pre-amplifier).

SPARE SUPPLIES

A double socket marked "A.C. OUTLETS" is fitted as a convenient source of power supply for gramophone motors, etc. Corresponding plugs, with 6 ft. (2 metre) cables are supplied with the amplifier.

DIMENSIONS

10 $\frac{1}{2}$ " \times 12 $\frac{1}{4}$ " \times 6 $\frac{2}{3}$ " high (26.7 \times 31.1 \times 17.5 cms.).

WEIGHT

22 lbs. 6 ozs. (10.15 kgs.).

FIXING

Four brackets and screws are supplied for fixing the amplifier to a baseboard.

PRICE: 29 guineas.

The 'Stereo 50' Power Amplifier

The "Stereo 50" is effectively a larger and more powerful version of the "Stereo 20". The total power output of 50 watts is sufficient for theatres seating a thousand people or more. The power output is more than adequate in a house which is wired for the simultaneous use of loudspeakers in several rooms.

All details of Function, Ease of Operation, Ease of Installation, Craftsmanship, Appearance and Finish and Circuitry are similar to those listed previously for the "Stereo 20".

SPECIFICATION

VALVES (Tubes)

3 — ECC83 or B339 or 12AX7.

4 — EL34 or KT66 or 5881.

1 — GZ34 or 5AR4.

(International standard types of world-wide availability).

POWER OUTPUT

50 watts r.m.s. maximum (25 watts per channel).

100 watts peak (50 watts per channel).

TOTAL HARMONIC DISTORTION

0.1% for 20 watts r.m.s. output per channel (± 1 db) at 1,000 c/s.

HUM AND NOISE

80db, (± 3 db), below maximum output with a source impedance of 25,000 ohms.

SENSITIVITY

An input of 120mV gives maximum output.