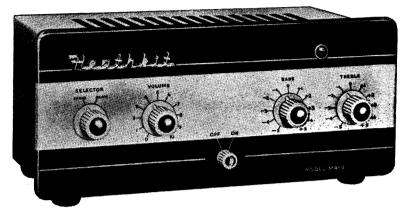


MONOPHONIC AMPLIFIER KIT MA-5

MAKES HIGH FIDELITY AVAILABLE TO EVERYONE, AT A PRICE YOU CAN AFFORD.

EVEN AN ABSOLUTE NOVICE CAN BUILD THIS KIT.



(Also available assembled)

- ★ 5 Watts output.
- * Bass and treble controls.
- * Completely self-contained amplifier.
- ★ Printed circuit board simplifies assembly.
- ★ Suitable for either free-standing or mounting in a cabinet.

The Model MA-5 high fidelity amplifier has been specially designed for those music lovers who require a high quality monophonic amplifier capable of giving far superior results to those obtained by the ordinary radiogram, at the lowest possible cost. It is based on the very popular Model S-33 stereo amplifier and uses the same cabinet and chassis, thus effecting a worthwhile saving in cost. The output of 5 watts is sufficient for a large room or small hall and provision is made for the use of a radio tuner such as the FM-4U or AFM-1 and a high-output gramophone pick-up. When assembled in accordance with the fully illustrated and complete step-by-step instructions contained in the manual supplied with each kit, it will give many years of enjoyable, trouble-free listening.

A choice of two inputs, GRAM and RADIO, is provided on the rear flange of the chassis. Provision is made for using either 3 ohms or 15 ohms speaker systems via a screw type terminal panel at the rear of the amplifier.

This amplifier is completely self-contained and can be mounted in a cabinet, or simply stood on a bookshelf or room divider. It should be noted, however, that in common with all integrated amplifiers, this model should preferably be mounted horizontally, or tilted not more than 30 degrees from this position.

The two-tone grey control panel with its golden emblem and matching knobs will harmonise with most types of wood and be found suitable for use with almost any contemporary or traditional furnishing scheme.

SPECIFICATIONS

Power Output	.5 watts (2 EL84's in parallel in ultra linear configration).	Tone Controls	Treble. 6dB lift and 15 dB cut at 9 Kc/s.
Distortion	.Less than 0.5% total harmonic content at 1000 c/s. Less than 1% at 5000 c/s.	Valve Complement Power Supply	
Sensitivity	.Radio. 250 millivolts 0.5 meg. impedance approx.	Tower Supply	240-250, volts AC, 40-60 cycles.
	Gram. 250 millivolts 0.5 meg. impedance approx.	Dimensions	\times 5 $\frac{1}{4}$ ".
Nominal Output Impedance		Finish	Stove enamelled two-tone grey metal panel with brass trimmed knobs.
Hum and Noise	Better than -60 dB referred to 5 watts.	Weight	$1.17\frac{3}{4}$ lb. (net). 18 $\frac{1}{4}$ lb. (shipping).

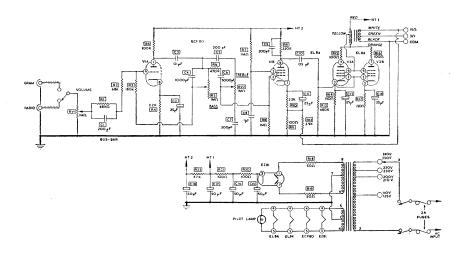
THERE'S NO BETTER BUY — THAN HEATHKIT HI-FI!

CIRCUIT DESCRIPTION

The first valve is a triode-pentode (ECF 80) with the triode section forming the tone control stage using a negative feedback loop.

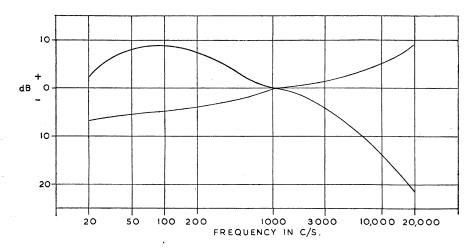
The high-pass or 'rumble' filter is also incorporated in this stage, which is followed by the pentode section and then the ultra-linear output stage comprising 2 EL84 pentodes in parallel. Negative feedback is applied from the transformer secondary to the cathode of the ECF80 with the appropriate phase correction. The output transformer is a sectionalised type having a high inductance and low leakage reactance and is specially designed to operate with a high DC current.

The rectifier is a heavy duty type (EZ81) and the unusually generous smoothing capacity of no less than $200\mu f$ contributes to the very low hum level.

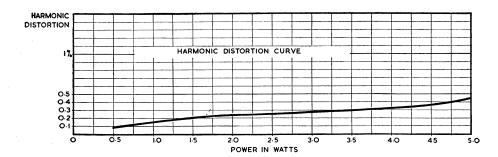


HEATHKIT Model MA-5 CIRCUIT DIAGRAM

(In accordance with our policy of keeping abreast with technical development, we reserve the right to modify this circuit wherever desirable).



TONE CONTROLS



world. A high proportion of these have been successfully built by absolute novices. This is convincing proof of our claim that Heathkit equipment is the cheapest to buy, exceptionally good value for money, the easiest to assemble and a lasting pleasure to use. No special equipment or knowledge is necessary. The 32 page Heathkit Instruction Manual tells you in simple language exactly where every part goes and when and how to fix it. Numerous illustrations and large pictorials show the components and each stage of the assembly so that you virtually cannot go wrong.

Millions of Heathkit models are in regular use all over the

OUTPUT DISTORTION

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