

Stan Curtis Class A Amplifier Update

(as published in ETI February 1986)

1. The sound quality is improved by using 1% 1/4W metal film resistors throughout.
2. With most good loudspeakers it is worth removing the Zobel network (C8, R41) and replacing the output choke (L1, R40) with a 10 W wirewound 0R22 resistor.
3. There will be some difficulties in setting up the amplifier unless zener diodes ZD1 and ZD2 are close tolerance types or closely matched to each other.
4. Capacitor C1 can be left out or, if there is a danger of offset voltage at the pre-amplifier output, replace it with 1u0 100 volt polyester.
5. Capacitor C3 should be replaced by a 22p 100 V polystyrene type.
6. When setting-up the standard current, the case should be as complete as possible since this affects the thermal equilibrium.
7. The heatsinks should be chosen to allow the amplifier to run at a case temperature of between 40 and 50°C. Since each output transistor dissipates 40W, each should be bolted to a heatsink having a rating of less than 1°C/W.
8. The power supply wiring, the output wires and the wires to the output transistors should be as thick as practically possible (at least 2.5 mm).
9. Constructors will find it worth resetting the standing current and DC offset voltage after the amplifier has been in use for about ten hours.

C. Stan Curtis 1986