

V77

Technical Details & Function

The two-stage Microphone Amplifier V77 is a further development of the Studio Amplifier V72. In spite of electrical date of the V72 and the intrinsically higher amplification, the circuit is not very different from the existing V72.

The input transformer has a turns ratio of 40:1 and has a disc wrapped casing to counter extraneous fields. Between the anode of the second valve and the cathode of the first valve is a negative feedback coupling; an amplification of 60dB is possible by adjusting resistor 20. Capacitor 47 blocks the DC from the negative feedback and the trimmer capacitor 40 adjusts the frequency range to 15kHz.

The feedback resistor in the cathode supply of the first EF804S valve is composed of fixed resistor 28 for 60dB amplification. Whereas by changing the bypass of the larger resistor 12, the amplification can be varied down to 40dB. In order to make this possible, the junction of resistor 12 and resistor 28 is connected to capacitor 48 to retain the DC.

The final valve is connected to a DC free output transformer with cylindrical casing. The mains supply is fitted with a solid state rectifier.

The smoothing of the anode supply is achieved by resistors and capacitors. The heater voltage is adjusted by potentiometer 6 for balanced symmetry. The mains transformer is also shielded against stray fields by the provision of a Mu-Metal screen.