

STEREO MICROPHONE AMPLIFIER

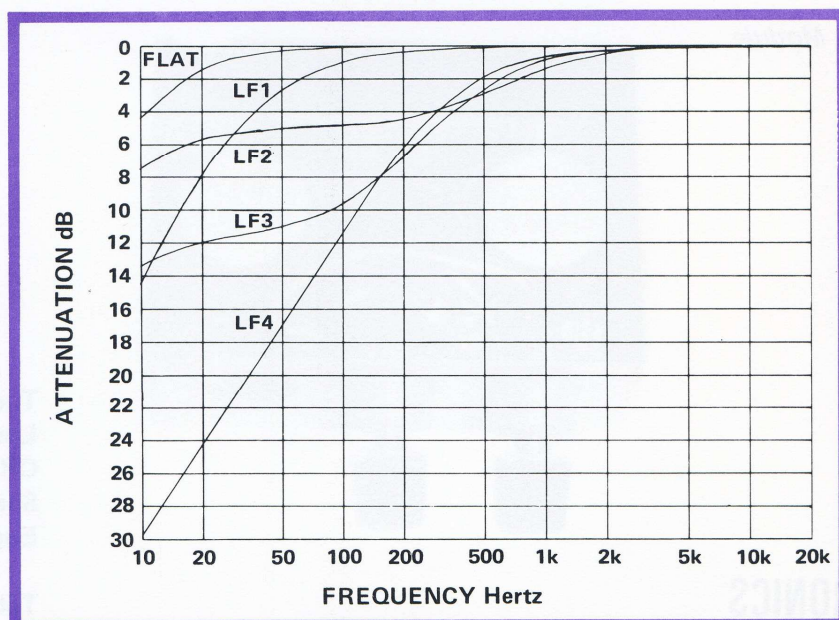
- 50 OR 200 OHM MICROPHONES TO BALANCED LINES
- COMPLETE BOXED UNIT OR AMPLIFIER MODULE ALONE
- INPUTS FILTERED AGAINST RADIO INTERFERENCE



The Stereo Microphone Amplifier takes inputs from 50 or 200 Ohm microphones and offers good noise and input loading characteristics by a series-parallel arrangement on the transformer primary. The gain is variable in five 10dB steps and a choice of four low frequency roll-off curves is available in addition to a flat response position. Low frequency attenuation is often useful in improving the clarity of recordings and the various curves available are shown in the graph.

Thorough precautions are taken against radio frequency breakthrough in the input circuitry where the microphone signals pass through toroidal ferrite choke and capacitor filtering. Low harmonic and intermodulation distortion figures are maintained at all gain settings and levels up to clipping. The balanced line output has a low source impedance and will drive 600 Ohms or higher loads.

The amplifier is available as a complete boxed mains powered unit, with a mumetal screened mains transformer, or as a module which includes all the signal circuitry, with selector switches and control knobs, mounted inside a mumetal screening box and requiring ± 15 volt supplies. The input transformers themselves are also mumetal shrouded and the double screening of the input makes for very good immunity to magnetic hum fields from nearby equipment.



At low frequencies these curves shelve as follows:

Gain dB	Attenuation
65	-29
55	-27
45	-24
35	-16
25	-7

SPECIFICATION

Inputs

Input impedance, 20Hz – 20kHz

HIGH

LOW

Transformer balanced.

Higher than 1kOhms, for 200Ohms microphones.

Higher than 250Ohms, for 50Ohms microphones.

Outputs

Output source impedance

Electronically balanced, polarity non-inverting.

Less than 150Ohms, 20Hz – 20kHz.

Outputs loaded 600Ohms:

Total harmonic distortion

Minimum gain

100Hz – 20kHz –80dB, 0.01%

20Hz –50dB, 0.3%

Maximum gain

1kHz –66dB, 0.05%.

20Hz – 20kHz –56dB, 0.15%.

Static intermodulation distortion, 50Hz + 7kHz, 4:1

Output +20dBV.7, any gain

–80dB, 0.01%.

Noise all figures referred to input

HIGH input (LOW input)

Short circuit source

200Ohms source

20Hz – 20kHz mean reading

–128dBV.7 (–134dBV.7)

–125dBV.7 (–131dBV.7)

CCIR468–2 peak

–120dBV.7 (–126dBV.7)

–115dBV.7 (–121dBV.7)

Radio frequency breakthrough

Output level in a carrier field strength of +100dB μ V/m, 84MHz, 100% amplitude modulated with 1kHz sine wave.

1m input lead with 200Ohms source

Less than –60dBV.7, any gain setting.

Crosstalk, 200Ohms source, HIGH input

Minimum gain

20Hz – 20kHz –80dB.

Maximum gain

1kHz –64dB; 20Hz – 20kHz –40dB.

Frequency response

± 1 dB 30Hz – 20kHz. Four 1f cuts, see graphs.

Clipping point

+24dBV.7 output, 20Hz – 20kHz.

Gain, HIGH input (LOW input)

25dB to 65dB (31dB to 71dB) in 10dB ± 1 dB steps.

BOX UNIT

Connections

XLR 5-pole, input female, output male.

Pin 1 common; Pin 2 left red; Pin 3 left blue; Pin 4 right red;

Pin 5 right blue.

Supply

Captive 3 core cable to BS6500 3m long.

90–120V OR 200–250V, 50–60Hz, 5VA.

Safety

Complies with IEC65–2, BS415.

Dimensions and weight

W 120mm, H 65mm, D 210mm; 1.6kg.

MODULE complete with mumetal box, switches and knobs

Supplies

± 15 V at 70mA maximum. $I_q = 20$ mA.

Dimensions and weight

W 105mm, H 45mm, D 80mm; 450g.

Module

