

Matchamp XTX131 Mic Amplifier

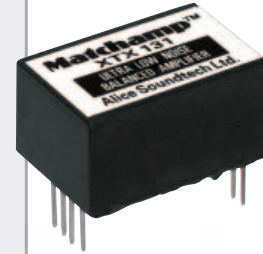
Matchamp XTX131 Microphone Amplifier Module

The Matchamp XTX131 is a very high-performance, state-of-the-art balanced microphone amplifier module which achieves a noise performance which is typically less than 0.5dB from theoretical Johnson noise when used with 150-200 ohm microphones. The device achieves this high performance by eliminating the need to employ an input transformer and offers improved frequency response, noise performance, distortion, signal handling and common-mode rejection ratio over typical transformer microphone input stages.

The improvement in common-mode rejection makes the device particularly useful for location recording and outside broadcasts where high levels of interference are common. The device achieves 40dB to 50dB better CMRR than most transformer designs at high audio and low RF frequencies. An RF filter circuit is incorporated within the device which gives further interference protection. The fully encapsulated module is extremely small (30x20x15mm) and is PCB mountable with 0.1" spaced pins.

The extremely low self-noise of the Matchamp XTX131 will find particular application when used with digital recorders which do not tend to mask mic-amp noise in the same way that many of their analogue predecessors have in the past. The XTX131 incorporates internal protection against phantom power, resulting in fewer external components.

The Matchamp XTX131 is also available as a ready-built and tested mic amp card with connections via an 8-pin Molex-type connector (mating connector and 4k7 ohm reverse log gain pot supplied). Gain range 10dB to 60dB.



Technical Specification

Supply voltage range:	±15V to ±20V DC
Current consumption:	16mA per rail (typical)
Maximum input level:	+24dBu
Maximum output level:	+23dBu
Minimum load impedance:	600 ohms
Performance:	at 60dB gain with 150 ohms source and ±18V supply
Relative input noise:	-131.3dB (30Hz to 15kHz)
Common-mode rejection:	105dB at 10kHz
Distortion at 0dBu output:	0.006% THD
Dimensions (XTX131):	30mm (W) x 20mm (D) x 15mm (H)
Dimensions (Card):	55mm (W) x 38mm (D) x 20mm (H)