

Model PRM831

Preamplifier for Model 831 Sound Level Meter

The Larson Davis PRM831 is a microphone preamplifier for use with electret microphones with a Larson Davis Model 831 Sound Level Meter. The preamplifier requires very little supply current and operates over wide temperature and humidity ranges. The attenuation is minimal when operating with 50mV/Pa sensitivity microphones up to a Sound Pressure Level of 143dB peak. The preamplifier will drive 300 feet of cable with an 20kHz to a maximum amplitude of 10V rms.



FUNCTION	SPECIFICATION	REMARKS
Frequency Response	5Hz-126kHz	(+ 0.1/- 0.5)dB
Attenuation	0.08dB	Typical
Input Impedance	10GΩ//0.16pF	Typical
Output Impedance	50Ω	Typical
Maximum Output Voltage	28Vpp	14.3V peak for microphones with 50mV/Pa sensitivity
Maximum Output Current	12mA peak	143dB peak for mics with 50mV/Pa sensitivity
Distortion	Harmonics < -70dBC	8V rms output @ 1kHz
Output Slew Rate	2V/μS	Typical
Electronic Noise	- 1.6μV A-weighted - 3.5μV Flat (20Hz-20kHz)	Typical for 18pF microphone
Power Supply Voltage	15 to 36 Volts	
DC Output Level	0.5 X Power Supply Voltage	
Power Supply Current	1.9mA	Typical
Temperature Sensitivity	< ± 0.05 dB (-40deg to 176 deg F)	-40 deg to 80 deg C
Humidity Sensitivity	< ± 0.05 dB (0-90% RH)	Non-condensing @122°F
Dimensions	0.5" dia x 2.88"L	12.7mm dia x 73mm L
Compatibility	Larson Davis 377B02 or any 1/2" electret microphones having about 50mV/Pa sensitivity	ADP043 or ADP008 adaptors for 1/4" or 1" microphones



Total Customer Satisfaction Guaranteed

Larson Davis, Inc.

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