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MODEL 8300 MICROPHONE PREAMPLIFIER

Like the Model 8200 Parametric Equalizer, the basic design of the GML 8300 Microphone Preamplifier is derived from the input module of the GML Master Recording Console, long regarded as having the finest signal throughput quality of any audio console. Listening analysis has lead us to believe this the most versatile and musical sounding circuit topology available and that it satisfies the needs of the most demanding professional. This new unit is hand built and calibrated in limited production quantities using selected components.

Discrete Bipolar Topology	No FET's or IC's in signal path
Transformerless	Active servos for D.C. stabilization
Electrolytic capacitors used only in phantom bypass (may be removed)	

SPECIFICATIONS

INPUT

1kohm balanced input
80 dB common mode rejection at 100Hz & 10kHz
+12.4 dBv maximum before clipping ($\pm$ 28 VDC supplies)

THROUGHPUT

20 volts/microsecond minimum symmetrical at 30 dB gain
Distortion: Maximum SMPTE intermodulation at +20 dBv output level;
  0.0015% at 30 dB gain   0.007% at 70 dB gain
Effective input noise:
  < -126.5 dBv with 150 ohm source   < -129.5 dBv with 0 ohm source
  (measurements at 400Hz & 30 KHz, 12 dB/octave high & low-pass filters (ref: 0.775v)
Frequency response:
  +0, -0.2db @ 10 Hz & 50 KHz   +0, -0.3db @ 1.7 Hz & 260 KHz
Phase shift: 22 degrees @ 10 Hz & 260 KHz

OUTPUT

+27.4 dBv clipping
3 mv output D.C. offset (maximum) D.C. servo stabilized
external power supply: $\pm$28 Volts

FORM FACTOR

Number of channels: 4 maximum (2 or 4 on order)
Clip indicator: +24 dBv $\pm$0.5 dB
Gain: 15 to 70dB in 5db ($\pm$.25dB) steps
Enclosure: 1.75"X 19" rack mounting, 10" deep. Satin grain, black anodized finish
Front Panel Indicators: 4 red clip LED's, 1 green power LED
Phantom: 48 volt switchable, 40 ma. available. Each channel
  currently supplied with standard 6.81 Kohm, 1% resistors.

INSTRUMENTATION   Hewlett Packard 400 FL AC voltmeter
         Sound Technology 1710A Distortion Analyzer
         Tektronix 465 Scope and FG504 Function Generator