

ULTIMIKE™ Microphone Amplifier

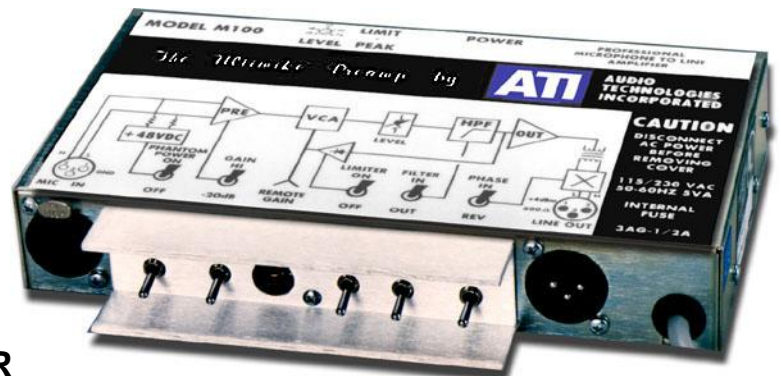
M100

Eliminate noise, pickup, RF, hum and rolloffs from long low-level microphone cables with the ULTIMIKE Microphone Amplifier. Ruggedly designed for up-close mic positions, impressive input headroom specs and smooth output limiting allow trouble-free unattended operation from remote or inaccessible locations. A unique distortion-free transformer-coupled output provides total isolation of ground loops and ground voltage differentials with a low line driving impedance for extended high frequency response when driving long lines.

The M100's direct, instrumentation amplifier input stage yields superior noise performance and eliminates the ringing, response and distortion problems of high ratio input transformers. High gain for low output microphones is combined with excellent input and headroom for complete freedom from overload. The maximum input level of 0dBu is increased to +20dBu in the low gain switch position. A screwdriver adjust audio taper full range gain control can be augmented with a convenient plug-in remote DC operated gain trimmer located up to 50 feet away. Other outstanding features include a clean output limiter, full 48VDC phantom power, a two-pole 150Hz low cut filter and switchable output phasing.

The ATI ULTIMIKE preamplifier is at home in broadcast, live sound and state-of-the-art recording studios worldwide.

- RUGGED CONNECTORS
- PROTECTED SWITCHES
- HIGH GAIN and HEADROOM
- SHIELDED POWER SUPPLY
- TRANSFORMER OUTPUT
- SWITCHABLE OUTPUT LIMITER
- PHANTOM POWER
- REMOTE GAIN CONTROL
- LOW CUT FILTER
- PHASE REVERSE SWITCH



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Technical Specifications

M100

GAIN	54dB nominal, adjustable 0 to 74dB
MAXIMUM INPUT	0dBu—HI Gain Switch; +20dBu—LO Gain Switch
MAXIMUM OUTPUT	+22dBm, transformer balanced, 600 ohms
NOISE OUTPUT	-70dBm, 20 to 20,000 Hz measurement bandwidth
HUM OUTPUT	-80dBm, 60, 120 and 180Hz
DYNAMIC RANGE	92dB, Maximum output to noise
HARMONIC DISTORTION	20 to 20,000 Hz, .10% THD maximum at max level, .03% THD maximum at nominal level
INTERMODULATION DISTORTION	.005% maximum, SMPTE 7k/60Hz 4:1
FREQUENCY RESPONSE	+0, -.25dB, 20-20kHz, -3dB at 1Hz and 65kHz
HIGH PASS FILTER	-3dB at 150Hz nominal, -40dB at 15Hz
INPUT HUM REJECTION	90dB minimum CMR, internal adjustment
LIMITER THRESHOLD	+14dBm out, \pm 1Db
LIMITER SLOPE	4:1 maximum
LIMITER TIMING	100mSec attack and recovery
LIMITER RANGE	20dB Gain Reduction minimum
REMOTE GAIN TRIMMER	10kohm linear external pot, user supplied; DC Control, 0 to -15dB range
PHANTOM POWER	+48VDC at 4ma through paralleled 6.8kohm precision resistors
AC POWER	115 - 230VAC \pm 10%, 47 TO 63Hz, 4VA
DIMENSIONS	1.5" (3.8cm) H x 8.5" (21.2cm) W x 5.5" (14cm) D 9.75" (24.8cm) W with mounting brackets
WEIGHT	3 lbs (1.4kg) net; 5 lbs (2.3kg) shipping weight
MOUNTING	Keyhole slot #8 screws on 9.125" (23.2cm) centers. Accessory rack panel P/N 20273-502 mounts 1 or 2 units in 1RU rack space.
CONNECTORS	Mic Input: XLR type, three terminal female. Line Output: XLR type, three terminal male. Remote Gain Trimmer: RCA type Phono Jack.
NOTE	Distortion, noise, dynamic range and response measurements all made at nominal gain settings Reference Levels: 0dBm = .775V/600 ohms; 0dBu = .775V
WARRANTY	Limited, One Year Warranty