

MODEL M267 MICROPHONE MIXER

Specification Sheet

GENERAL

The Shure Model M267 is a microphone mixer-remote amplifier specifically designed for professional applications. The excellent performance, versatility and features of this complete, compact console make it an ideal choice for studio, remote, or sound reinforcement use, and as an add-on mixer for expanding existing facilities. It is also ideally suited for use with audio and video tape recorders to provide multiple microphone inputs.

Features:

- Wide, flat frequency response and extremely low distortion up to +18 dBm output
- Extremely low noise and RF susceptibility
- Four switchable microphone- or line-level balanced-line inputs with individual gain controls and low-frequency rolloff switches. MUMETAL shielding on input transformers
- Feedback-type input gain controls for maximum clipping levels and dynamic range
- Output switchable for line or microphone level
- Built-in switchable peak limiter cuts output overload distortion, adapts to power supply voltage
- LED indicator shows limiter operation or overload with limiter defeated
- Externally adjustable limiter threshold (-4 to +18 dBm)
- VU meter calibrated for +4 and +8 dBm with range switch. Illuminated with ac operation
- Ac or built-in battery operation. Noiseless automatic switchover to battery in case of ac line failure. Battery test without program interruption
- Front-panel headphone level control and monitor jack drives almost any stereo or mono headphones; output can be additional unbalanced line feed to drive a tape recorder or power amplifier
- Direct mix bus for stacking units
- Automatic muting prevents speaker damage during turn-on and -off
- Low distortion, high-stability tone oscillator for line test
 and level checks

- All connections phased. Line output terminals phase-indicated
- Compact and lightweight, with rugged, abrasion-resistant case
- Internally selectable 120 or 240 Vac, 50/60 Hz operation
- Underwriters' Laboratories Listed and Canadian Standards Association listed as Certified

SPECIFICATIONS

Frequency Response

30 Hz to 20,000 Hz, ±2 dB

Voltage Gain (at 1,000 Hz)

⁽Outputs terminated: line 600 Ω , microphone 150 Ω , mix bus 3.3 k Ω , headphone 200 Ω , tip-sleeve and ring-sleeve)

Instant	OUTPUT			
input	Line	Microphone	Mix Bus	
Low-Impedance Microphone (150 Ω)	91 dB	41 dB	24 dB	
Line	40 dB	–9 dB	–27 dB	
Mix Bus	55 dB	5 dB		

Inputs

	IMPEDANCE		
Input	Designed for Use With	Actual (Internal)	Input Clipping Level
Microphone	19 to 600 Ω	1 kΩ	-32 dBV to -5 dBV* (25 mV to 0.56 V)
Line	Less than10 kΩ	66 kΩ	+20 dBV
Mix Bus	3.5 kΩ	$3.5 \ \text{k}\Omega$	+7 dBV (2.2 V)

*Depending on input control setting

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Outputs

	IMPEDANCE		
Output	Designed for Use With	Actual (Internal)	Output Clipping Level
Microphone	Any low imped- ance microphone input	0.5 Ω	–34 dB (20 mV)
Mix Bus	3.5 kΩ	3.5 kΩ	–8 dBV (400 mV)
Head- phones	8 - 2000 Ω 200 Ω recommended	400 Ω το 3 kΩ**	+10 dBV (3.3 V)
Line	600 Ω	150 Ω	+18 dBm (6.2 V)

**Depending on level control setting

Noise

Equivalent Input Hum and Noise: –126 dBV (low impedance microphone, 150 Ω - 20-20,000 Hz) into a 600 Ω load at full gain

Output Noise: -75 dBV (master control fully counterclockwise), -53 dBV (master fully clockwise), (input controls down, 300-20,000 Hz)

Output Hum and Noise: –70 dBV (master control down), –51 dBV (master control up) (input controls down, 20-20,000 Hz)

Distortion

0.35% or less THD from 30 to 20,000 Hz at +15 dBm output; 0.5% or less IM distortion up to +15 dBm output level

Common Mode Rejection

65 dB minimum with input of -20 dBV at 100 Hz

Control Interaction

Less than 1 dB with any control combination

Overload and Shorting Protection

Shorting the outputs, even for prolonged periods, will cause no damage; microphone inputs will not be damaged by signals up to 3 volts

Lo-Cut Filters

6 dB/octave rolloff at 150 Hz

Limiter

Threshold: +15 dBm (line output level; adjustable from –4 to +18 dBm)

Attack Time: 3 msec typical

Recovery Time: 500 msec typical

Peak Indicator

Lights 6 dB below clipping or at onset of limiter action

Headphone Output Clipping Level

3.16V (+10 dBV) into 200 Ω

Tone Oscillator

1,000 Hz, 1.5% or less THD

Phantom Power

30 Vdc open-circuit, 3.3 $k\Omega$ series resistance, input switches in MIC position only

Operating Voltage

Ac Operation: 120 or 240 volts \pm 10%, 50/60 Hz, 9.5W, internally switchable \ddagger

Dc Operation: 27 volts nominal at 15 mA typical no-signal, 18 mA typical at 0 VU (+4 dBm) output with headphone load; 21.5 volts minimum

Battery life: approximately 20 hours with alkaline batteries at +4 dBm output in continuous use; three 9-volt batteries, type NEDA 1604A (Duracell MN1604 recommended)

Supplied wired for 120 Vac operation (See Service section for 240 Vac operation)

Temperature Range

Operating: -18° to 57° C (0° to 135° F) Storage: -29° to 71°C (-20° to 160° F)

Dimensions

See Figure 1



FIGURE 1

Weight

Net: 2.3 kg (5 lb 2 oz)

Packaged: 3.2 kg (7 lb 2 oz)

Certifications

Listed by Underwriters' Laboratories, Inc., and listed by Canadian Standards Association as Certified