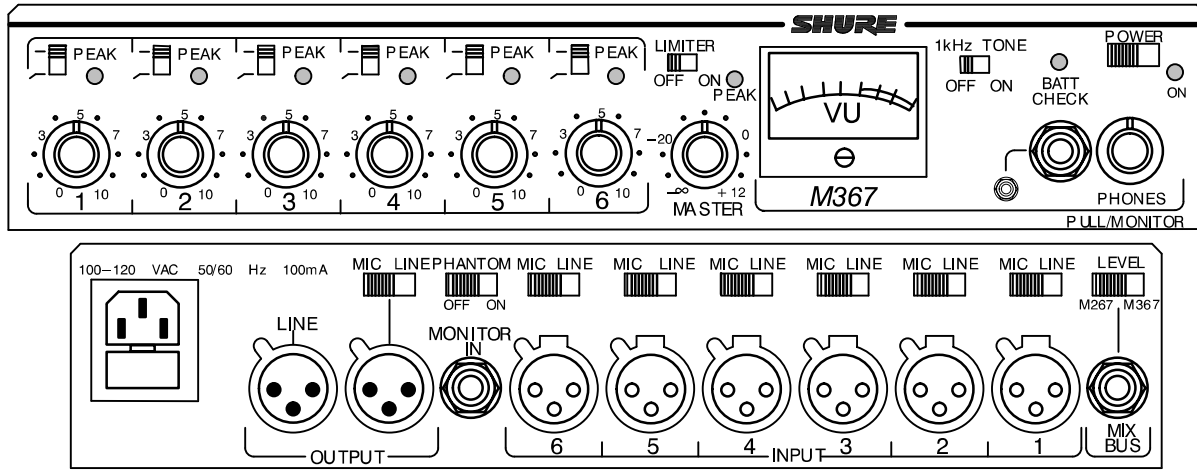


### M367



### DESCRIPTION

The Shure M367 is a portable, six-input, two-output (mono), battery-powered microphone and line level mixer/preamplifier. Its transformer-isolated design, low-noise performance, and compact and rugged construction make the M367 an ideal choice for studio and mobile broadcast, electronic news gathering (ENG), and electronic field production (EFP) applications.

This versatile mixer can also be used for:

- digital transmission links
- digital video/audio recording media (ISDN, hard disk recording, and DAT)
- sound reinforcement

The M367 comes with rubber feet, detachable power cord, and spare power line fuse. It can be rack mounted using the optional Model A367R rack mount kit.

### FEATURES

- Six selectable mic/line inputs
- Selectable mic/line output and dedicated line output
- Transformer-balanced inputs and outputs for superior rejection of RFI and electromagnetic hum
- Professional mechanical VU meter—LED backlighting for high reliability, no lamp replacement
- Headphone monitoring (1/4", 3.5 mm)
- Output peak limiter with switchable threshold and bi-colored LED indicator
- Peak indicator LED, and switchable low-cut filters on each input
- 1/4" return monitor input
- AC power or (2) 9V battery operation

### ADDITIONAL FEATURES

- 48 V or 12 V phantom power for condenser microphones
- 1 kHz tone oscillator
- Mutes all input channels when activated
- Tone level control is on the master
- Wide-range input gain controls handle hot signal levels without attenuators
- Customized operation via internal DIP switches, trim pots, and optional alternate wiring
- Battery check switch and low battery warning indication
- Power-on LED
- Input expansion via mix bus jack to link M367s or other mixers
- Rugged all metal chassis with protective end caps
- Detachable ac power cord

### OPTIONAL ACCESSORIES

Rack Mount Kit ..... A367R

### REPLACEMENT PARTS

Foot Kit (4 in kit) .....	90S8100
M367 Fuse, 0.125 A, 250 V .....	80E380
M367E Fuse, 0.063 A, 250 V .....	80G380
Knob	
Master .....	95A8238
Channel Gain, Phones .....	95B8238
Line (Power) Cord	
M367 .....	95A8389
M367E .....	95B8389

### STATEMENT OF CONFORMITY

This certifies that the Shure M367E Microphone Mixer meets the specifications and regulations embodied in Vfg 243/1991, amended 1992. The Bundesamt für Zulassungen in der Telekommunikation has been notified that this device has been marketed and has been provided the right to verify the device or system for compliance with the specifications.

Conforms to European Union directives, eligible to bear CE marking; VDE GS-Certified to EN 60 950; meets European Union EMC Immunity Requirements (EN 50 082-1, 1992); RF radiated (IEC 801-3): meets Criterion A, ESD: meets Criterion B, EFT (IEC 801-4): meets Criterion B.

## SPECIFICATIONS

### Frequency Response

20 to 20,000 Hz  $\pm$  2.0 dB (channel controls centered)

### Total Harmonic Distortion

0.25% THD at +4 dBm output, 55 to 20,000 Hz

### Voltage Gain

Input	Output				
	Line	Mic	Phones	Mix Bus (M367)	Mix Bus (M267)
Low-Z Mic (150 $\Omega$ )	87 dB	40 dB	103 dB	66 dB	27 dB
Line	37 dB	-11 dB	53 dB	15 dB	-25 dB
Monitor	—	—	12 dB	—	—
Mix Bus (M367)	10 dB	-38 dB	26 dB	—	—
Mix Bus (M267)	50 dB	2 dB	66 dB	—	—

### Inputs

Input	IMPEDANCE		Input Clipping Level
	Designed for Use With	Actual (Internal)	
Mic	19 to 600 $\Omega$	1 k $\Omega$	-10 dBV
Line	$\leq$ 10 k $\Omega$	50 k $\Omega$	+36 dBV
Monitor	$\leq$ 1 k $\Omega$	13 k $\Omega$	0 dBV
Mix Bus (M367)	930 $\Omega$ bal.; 1860 $\Omega$ un-bal.	930 $\Omega$ bal.; 1860 $\Omega$ un-bal.	+23 dBV
Mix Bus (M267)	3.5 k $\Omega$	3.5 k $\Omega$	-17 dBV

### Outputs

Output	IMPEDANCE		Output Clipping Level
	Designed for Use With	Actual (Internal)	
Mic	Low-Z inputs	1 $\Omega$	-31 dBV
Line	600 $\Omega$	150 $\Omega$	+18 dBm
Phones	8 to 200 $\Omega$	300 $\Omega$	+11 dBV
Mix Bus (M367)	930 $\Omega$ bal.; 1860 $\Omega$ un-bal.	930 $\Omega$ bal.; 1860 $\Omega$ un-bal.	+11 dBV
Mix Bus (M267)	3.5 k $\Omega$	3.5 k $\Omega$	-28 dBV

### Equivalent Input Noise

$\leq$  -127 dBV with 150  $\Omega$  source, 400 to 20,000 Hz

### Output Noise

Master level full CCW: -100 dBV, 400 to 20,000 Hz

Master level full CW: -80 dBV, 400 to 20,000 Hz

### Hum and Noise

Equivalent Input:  $\leq$ 125 dBV, 20 to 20,000 Hz

Output: -95 dBV (Master CCW); -75 dBV (Master CW), 20 to 20,000 Hz

### Common Mode Rejection Ratio

65 dB at 100 Hz, -20 dBV input

### Overload and Shorting

Shorted outputs, even for prolonged periods, cause no damage. Microphone inputs of up to 3 Vrms cause no damage. Line and monitor can withstand signals of up to 30 Vrms.

### Polarity

Mic/Line In to Mic/Line Out	Non-Inverting
Mic/Line In to Phones	Non-Inverting
Mic/Line In to Mix Bus (tip)	Inverting
Monitor to Phones	Non-Inverting
Mix Bus to Mic/Line Out	Inverting

### Input Peak Indicators

6 dB below clipping level

### Output Peak Indicator

Lights red at 6 dB below clipping level

### Output Clipping Level

$\geq$  +18 dBm at line output into 600  $\Omega$

### Low-Cut Filters

7 dB down at 150 Hz; 6 dB/octave slope (3 dB down at 260 Hz)

### Tone Oscillator

1 kHz  $\pm$  20%

### Limiter

Threshold: Switchable: 0, +4, +8, +16 dBm

Attack Time: 1 ms  $\pm$  0.5 ms

Release Time Constant: 100 ms  $\pm$  30 ms

Indicator: Green when limiting by 1 dB or more

### Phantom Power

12 V Phantom: 12 V through 340  $\Omega$

48 V Phantom : 48 V through 3.4 k $\Omega$

### AC Power

**M367**: 100–120 Vac, 50/60 Hz, 100 mA

**M367E**: 220–240 Vac, 50/60 Hz, 50 mA; no-signal current drain 25 mA

### DC Power

18 Vdc nominal at 40 mA typical no-signal, 45 mA typical at +4 dBm output; 13.5 Vdc minimum

### Batteries

Two 9 V alkaline batteries

### Battery Life

Up to 8 hours\* at +4 dBm output in continuous use.

\* (see *Battery Operation*)

### Temperature Range

Operating: -18° to 57° C (0° to 135° F)

Storage: -29° to 74° C (-20° to 165° F)

### Overall Dimensions (H x W x D)

71.9 mm x 308 mm x 233 mm (2<sup>13</sup>/<sub>16</sub>" x 12<sup>5</sup>/<sub>32</sub>" x 9<sup>5</sup>/<sub>32</sub>") including feet

### Weight (without batteries)

3 kg (6.6 lb)

*Measurement conditions (unless otherwise specified): operating voltage 120 Vac, 60 Hz (18  $\pm$  1 Vdc for dc test); operating temperature 22° C (72° F); input signal 1 kHz; internal DIP switches 1–7 open; Power switch on; Mic/Line switches to Line; low-cut switches to flat; Limiter out; Phantom power off; Mix Bus to M367; channel 1 gain full CW; channel 2 through 6 full CCW; Master full CW; Phones level full CCW; Line output terminations 600  $\Omega$  (pins 2 and 3); Mic output terminations 150  $\Omega$  (pins 2 and 3); Phones (1/4"–ring) 300  $\Omega$  to ground; Phones (1/4"–tip) 300  $\Omega$  to ground; Phones (3.5 mm) unloaded; Mix Bus 930  $\Omega$  (M367 position) or 3.5 k $\Omega$  (M267 position), not connected unless specified; 1 kHz input signal.*