

# **SM137** Instrument Microphone

The Shure versatile, flat-response cardioid condenser probe microphone, SM137, user guide. Version: 3.1 (2025-A)

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### SM137 Instrument Microphone

## General Description

The Shure<sup>®</sup> SM137 is a versatile, flat-response cardioid probe microphone with an ultra-thin diaphragm. Its frequency response combines smooth high-end and tight, controlled low-end. A 15 dB pad provides natural, consistent sound reproduction in both acoustic and high-volume performance applications.

### Performance Characteristics

- Extremely uniform polar response
- Extended frequency response
- Minimal self-noise
- Exceptional low-frequency reproduction
- Able to withstand high SPLs
- High output level
- No crossover distortion
- · Superior common-mode rejection and suppression of radio frequency interference (RFI)

# Applications

- · Brass and woodwind instruments
- · Orchestras, choirs, and wind ensembles
- · Overhead miking of drums and percussion instruments
- · Close-miking of acoustic instruments such as piano, guitar, violins, drums, and percussion
- · Low-frequency instruments such as double bass and kick drum
- · Electric guitar and bass amplifiers
- Vocals and speech
- Room ambience

**Note:** Sound quality is strongly affected by microphone location and room acoustics. To achieve the best overall sound for a particular application, it may be necessary to experiment with microphone placement and room treatments.

### Mounting the Microphone

Use the supplied microphone mount with floor or boom stands. Visit www.shure.com for more mounting options:

- To reduce the pickup of unwanted low-frequency mechanical vibrations, use an isolating shock mount.
- For stereo applications, use the optional Shure A27M Stereo Microphone Adapter.

### Setting Attenuation

The attenuation switch lets you reduce the signal level without altering the frequency response. This can prevent extremely loud sounds from overloading the microphone.

0 dB	For "quiet" to "normal" sound levels.
-15 dB	For use with extremely loud sound sources such as drums, horns, or loud guitar cabinets.

### Integral Pop Filter

The microphone grille consists of 3 separate mesh layers that act as an integral pop filter. This helps reduce wind and breath noise. Depending on the performer, an external pop-protection screen or windscreen may be necessary when close-miking vocalists.

### Load Impedance

Maximum SPL capability, output clipping level, and dynamic range vary with the input load impedance of the preamplifier to which you connect the microphone. Shure recommends a minimum input load impedance of 1000  $\Omega$ . Most modern microphone preamplifiers meet this requirement. Higher impedance results in better performance for these specifications.

### Power Requirements

This microphone requires phantom power and performs best with a 48 Vdc supply (IEC-61938). However, it will operate with slightly decreased headroom and sensitivity with supplies as low as 11 Vdc.

Most modern mixers provide phantom power. You must use a balanced microphone cable: XLR-to-XLR or XLR-to-TRS.

# Specifications

Type Electret Condenser

Frequency Response 20 to 20,000 Hz

Polar Pattern Cardioid

Output Impedance 150 Ω

Sensitivity (at 1 kHz, open circuit voltage)

-41 dBV/Pa[1]

Maximum SPL

(1 kHz at 1% THD)

1000 Ω load	139dB (154 dB, PAD ON)
2500 Ω load	144dB (159 dB, PAD ON)

Signal-To-Noise Ratio (Ref. 94 dB SPL at 1 kHz)

#### 75 dB[2]

#### Dynamic Range

(at 1 kHz)	
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1000 Ω load	120 dB
2500 Ω load	125 dB

### Common Mode Rejection (10 Hz to 100 kHz)

10 HZ to 100 KH.

>50 dB

#### Clipping Level (20 Hz to 20 kHz, at 1% THD[3])

1000 Ω load	3 dBV
2500 Ω load	9 dBV

Self Noise (typical, equivalent SPL, A-weighted)

19 dB

#### Attenuator Switch

-15 dB

#### Polarity

Positive pressure on diaphragm produces positive voltage on pin 2 with respect to pin 3

#### Weight

195 g (6.9oz.)

#### Connector

Three-pin professional audio (XLR), male

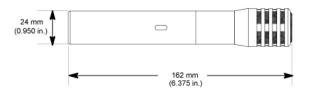
#### Power Requirements

48 V DC phantom power, 5.2 mA

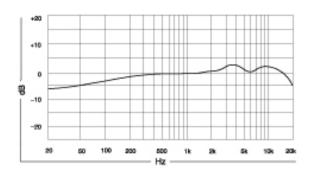
#### [1] 1 Pa=94 dB SPL

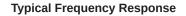
[2] S/N ratio is difference between 94 dB SPL and equivalent SPL of self noise, A-weighted

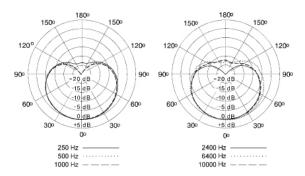
[3] THD of microphone preamplifier when applied input signal is equivalent to cartridge output at specified SPL.



#### **Overall Dimensions**

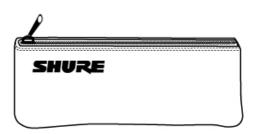




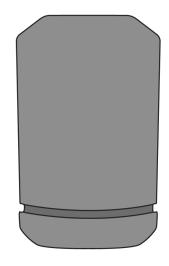




Accessories



**Zippered Carrying Bag** 



Windscreen



Microphone Clip

### Furnished Accessories

Storage Bag	95C2313
Black Foam Windscreen for PGA81, SM94 and SM137	A3WS
Microphone Clip for SM58, SM57, SM87A, BETA87A, BETA87C, PGA57, PGA58, PGA48, PGA81	A25D

### **Optional Accessories**

Shock Stopper <sup>®</sup> Isolation Mount	A55M
Shock Stopper Isolation Mount	A55HM
Popper Stopper <sup>®</sup> Pop Filter with Metal Gooseneck and Microphone Stand Clamp	PS-6

# Certifications

This product meets the Essential Requirements of all relevant European directives and is eligible for CE marking.

The CE Declaration of Conformity can be obtained from: www.shure.com/europe/compliance

Authorized European representative:

Shure Europe GmbH Global Compliance Jakob-Dieffenbacher-Str. 12 75031 Eppingen, Germany Phone: +49-7262-92 49 0 Email: info@shure.de www.shure.com