

KSM313

Dual-Voice Ribbon Microphone with Roswellite® Ribbon Technology

The Shure premium bidirectional ribbon microphone, KSM313, user guide. Version: 4 (2019-K)

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KSM313 Dual-Voice Ribbon Microphone with Roswellite® Ribbon Technology

General Description

The KSM313 is a premium bidirectional ribbon microphone for world-class audio recording and performance. The "Dual-Voice" design features discrete front and rear sonic signatures to accurately capture intimate vocals or intricate instrumentation.

The KSM313 is hand-assembled from state-of-the-art transducers, transformers and metals as the pinnacle of Shure quality. The revolutionary Roswellite® ribbon material replaces traditional foil ribbons with high tensile strength, toughness and shape-memory, providing superior resilience at extreme sound pressure levels (SPLs).

Features

- Legendary Shure quality and superior construction from hand-assembly of machined steel, silver, gold and aluminum components
- Revolutionary Roswellite ribbon material replaces traditional foil ribbons with high tensile strength, toughness and shapememory, providing superior resilience at extreme SPLs
- True "Dual-Voice" ribbon motor assembly, tuned specifically for user's choice of frequency response: address the front for warm and full sounding amplifiers, or swivel around for bright and flattering vocals and acoustic instruments
- 30-15,000 Hz frequency response ideal for capturing vocals, acoustic and amplified instruments
- · Uniform bidirectional polar pattern throughout the frequency range
- Custom-wound, double-shielded, full-size transformer minimizes signal loss and RF interference, and maximizes output
- Improved hard stand mount for flexible, discreet mic placement

Performance Characteristics

Ribbon microphones perform optimally with the least amount of loading on the ribbon element as practical. The higher the impedance input on the microphone, the better the low-end and mid-range frequencies are represented in the output signal. Shure recommends using preamps with impedance settings of 1000 Ohms or more, although different load impedances may be used for a desired sound quality.

This is a low-noise microphone. The combination of its efficient transducer, robust shielding, and custom transformer produces a low noise floor and output level equal to moving coil microphones.

Shure ribbon microphones have an exceptionally smooth, natural response and perform best with preamps that provide simple, transparent gain. However, Shure encourages experimentation to find the desired combination of color and transparency.

Applications

The unique Dual-Voice design of the KSM313 produces discrete front and rear sonic signatures. Position the sides, the null points of a bidirectional microphone, towards any unwanted sound sources. Some typical applications are listed below.

Address the front for a warmer, darker tone

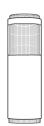
- · Electric guitar amplifiers
- · Brass and woodwind instruments
- · Upright bass
- Kick Drum



Address the rear* for a brighter tone with increased presence

- Vocals
- · Acoustic string instruments
- · Drum overheads and percussion

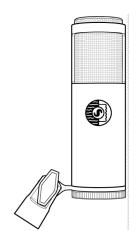
*When addressing the back side of a bidirectional mic, please remember to invert the signal polarity. Shure's A15PRS accessory is an in-line, balanced, polarity-reversing switch capable of this operation and is available online at: store.shure.com



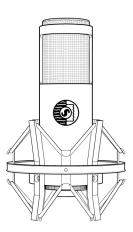
Mounting the Microphone

Thread the supplied stand adapter onto a floor or boom stand and insert the microphone.

Note: To reduce low-frequency vibrations transmitted through the stand, use an isolating shock mount. Visit www.shure.com for more information.



Stand Mount (furnished)



Suspension Mount (optional accessory)

Proximity Effect

Directional microphones progressively boost bass frequencies as the microphone is placed in closer proximity to the source. This phenomenon, known as proximity effect, can be used to create a warmer, more powerful sound.

Care and Handling

To protect your microphone, keep a few simple precautions in mind to ensure long-term performance:

- 1. Store your microphone in its protective case when it is not in use.
- 2. Maintain a reasonable distance from fluorescent lights, power transformers, and other strong electromagnetic sources to avoid hum.
- 3. Use a secure mount and stand and a quality balanced, shielded XLR connecting cable. For additional mounting accessories, visit our website: www.shure.com

4. Phantom power is not necessary and should not be supplied when connecting or disconnecting the microphone. However, properly supplied phantom power will not harm the microphone.

Specifications

Type

Dual-Voice Roswellite® Ribbon

Polar Pattern

Bidirectional

Frequency Response

30 to 15,000 Hz

Output Impedance

330 Ω

Sensitivity

open circuit voltage, @ 1 kHz, typical

-54.5 dBV/Pa [1] (1.88 mV)

Maximum SPL

146 dB SPL

Polarity

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

Housing

Machined Steel

Weight

400 g (14 oz.)

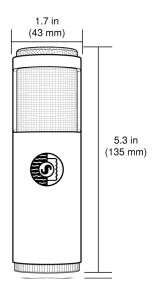
Accessories

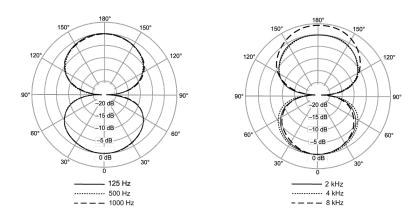
Furnished Accessories

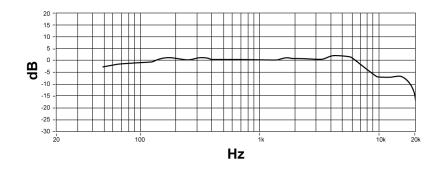
Carrying Case	AK313C
ShureLock® Stand Mount. Works with KSM313/NE, KSM313, KSM 353/ED.	A300M
Protective Velveteen Pouch. Works with KSM313/NE.	A313VB

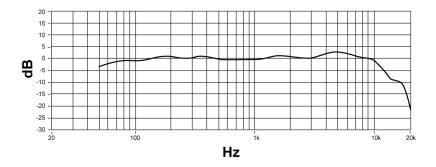
Optional Accessories

Elastic suspension shock mount. Works with all KSM313 versions	A313SM
Switchable Polarity Reverser	A15PRS
Popper Stopper® Pop Filter with Metal Gooseneck and Microphone Stand Clamp	PS-6
25 foot (7.5m) Triple-Flex [®] Microphone XLR Cable with Switchcraft connectors	C25E









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

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Note: Information in this guide is subject to change without notice. For additional information about this product, please visit www.shure.com.

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