

**SHURE<sup>®</sup>**

**KSM313**  
ROSWELLITE™  
RIBBON MICROPHONE



**USER GUIDE**

## GENERAL DESCRIPTION

The KSM313 is a premium bidirectional ribbon microphone for world-class audio and performance. The "Dual-Voice" design features discrete front-and-rear side sonic signatures for use with many amplified instruments or in intimate vocal applications.

These microphones are hand assembled in the U.S.A. from state-of-the art transducers, transformers and metals as the pinnacle of Shure quality for prestigious vocal and acoustic performances.

Revolutionary Roswellite™ ribbon material replaces traditional foil ribbons with high tensile strength, toughness and shape memory that provides superior resilience at extreme 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 shape memory that provides superior resilience at extreme SPLs
- 30 – 15,000 Hz frequency response ideal for capturing vocals, acoustic and amplified instruments
- Uniform bidirectional polar pattern throughout the frequency range
- 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
- Custom-wound double-shielded full-size transformer minimizes signal loss and RF interference, and maximizes output
- Protective mahogany case included for storage
- Monocle stand mount for versatile placement and orientation

## PERFORMANCE CHARACTERISTICS

The KSM313, like all ribbon microphones, performs 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. We recommend using preamps with impedance settings of 1000 Ohms or more.

The KSM313 is a low-noise microphone. The combination of its efficient transducer, robust shielding, and custom transformer give the microphone a low noise floor and output level equal to moving coil microphones. Certain ribbon designs have weaker magnets and less shielding, and require additional gain for optimum performance. This is not the case with the KSM313. Most professional level preamplifiers with normal gain and high input impedance are well suited for this microphone.

The KSM313 is quite natural sounding and does not require coloration at the preamp stage for optimal performance. Preamps that provide simple, transparent gain usually provide the best results. However, you may prefer a more colored sound, and we encourage you to experiment to find the right combination that suits your taste.

When addressing the rear side of the KSM313 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](http://store.shure.com)

## PROXIMITY EFFECT

With directional microphones, bass response increases as the mic is moved closer (within two feet) to the sound source.

This phenomenon, known as **proximity effect**, can be used to create a warmer, more powerful sound. To prevent explosive low frequency sound during close-up use, the KSM313 bass response gradually rolls off. This provides greater control and helps the user take advantage of proximity effect.

## CARE AND HANDLING

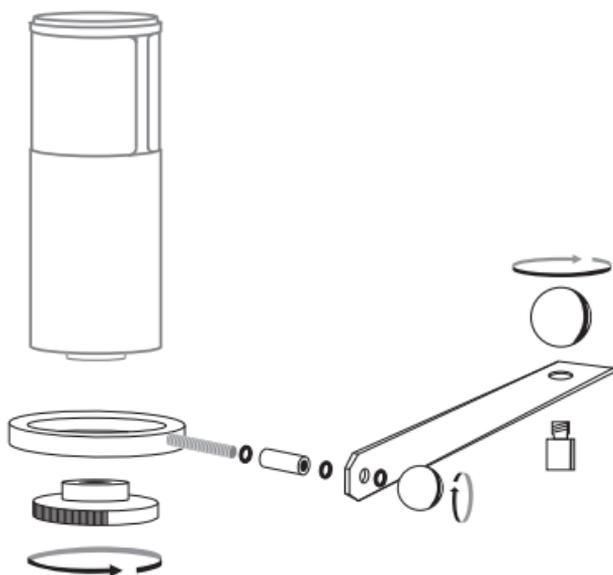
The KSM313 is a precision instrument designed for rugged use. However, it should be treated carefully to ensure reliable results during each session. To protect your microphone, keep a few simple precautions in mind to ensure long term performance:

1. Store your microphone in its protective case when it is not in use. Leaving the microphone lying around will expose the ribbon element to dust and other airborne particles that can adhere to the inner assembly and decrease performance. This advice applies to all high quality studio microphones!
2. When setting up the KSM313, 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 good quality balanced, shielded XLR connecting cable. For additional mounting accessories, visit our website: [www.shure.com](http://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.

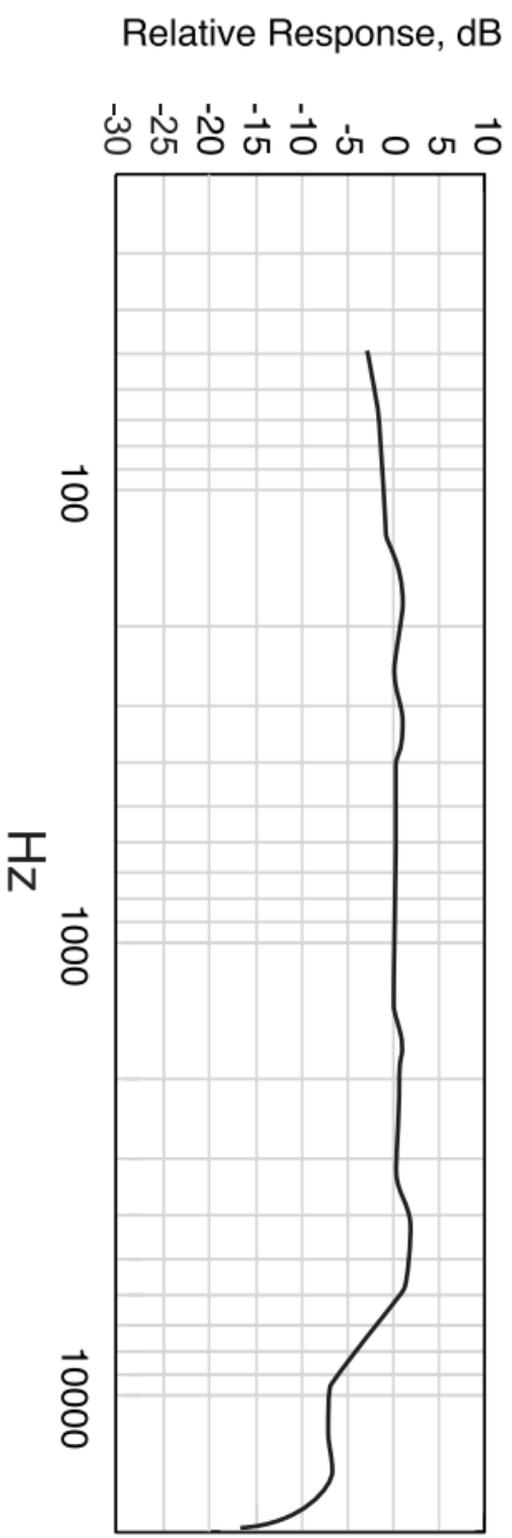
## SPECIFICATIONS

<b>Transducer Type</b>	Roswellite™ Ribbon
<b>Frequency Response</b>	30Hz – 15,000Hz
<b>Polar Pattern</b>	Bidirectional
<b>Output Impedance</b>	Transformer, balanced, actual 270 Ω
<b>Polarity</b>	Positive pressure on front side of ribbon produces positive voltage on pin 2 relative to pin 3, pin 1 ground
<b>Sensitivity (at 1 kHz, open circuit voltage)</b>	-54.5 dBV/Pa (1.88 mV/Pa)
<b>Dimensions &amp; Weight</b>	Diameter: 4.31 cm (1.70 in) Height: 13.5 cm (5.30in) Weight: 400g (0.88 lbs) Weight: 597g (1.13 lbs) w/monocle mount
<b>Max SPL</b>	146 dB
<b>Connector</b>	Three pin professional audio (XLR) male

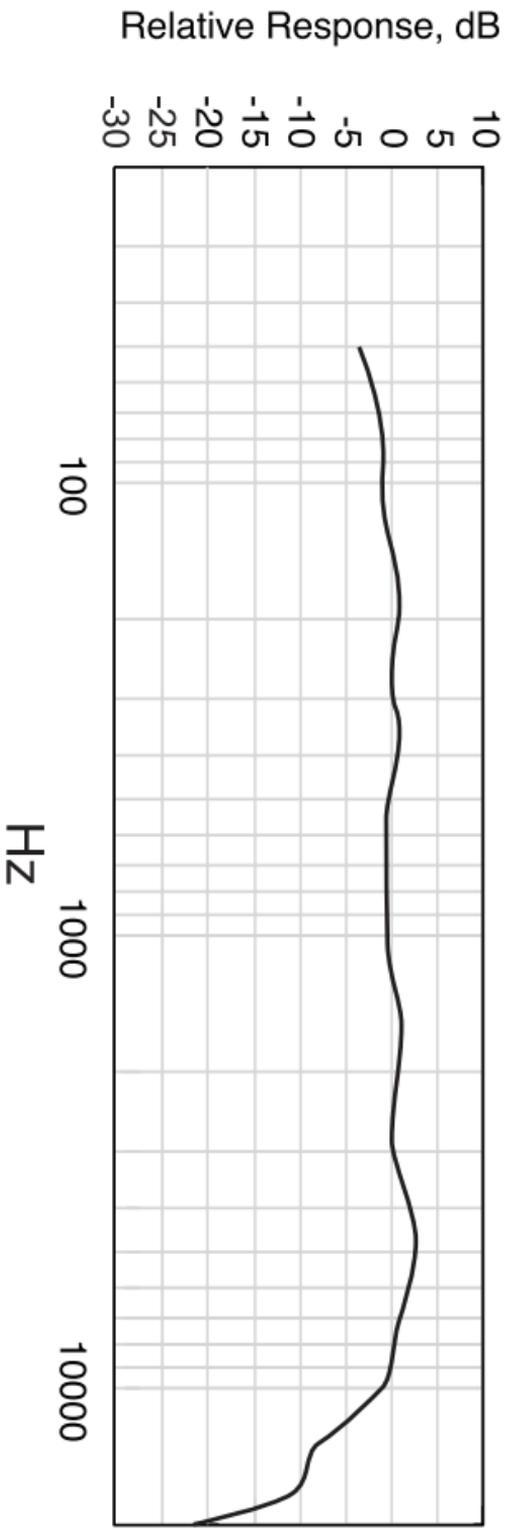
## MONOCLE MOUNT FOR KSM313



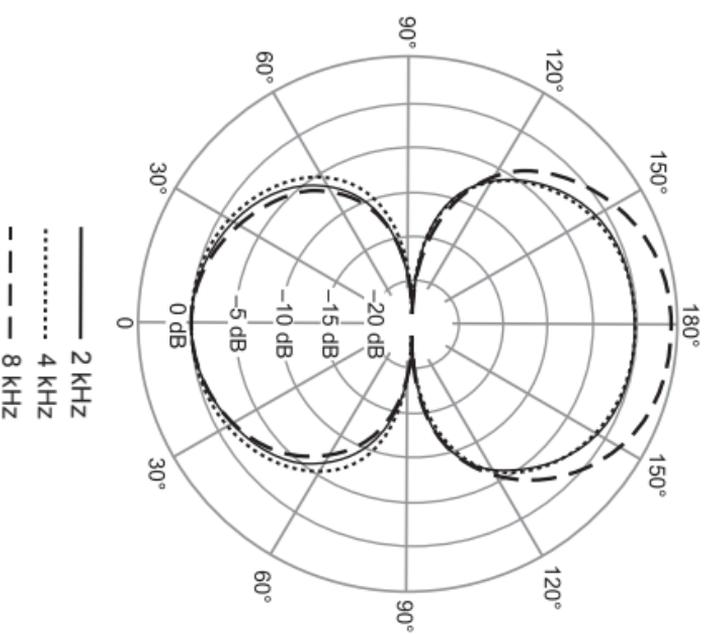
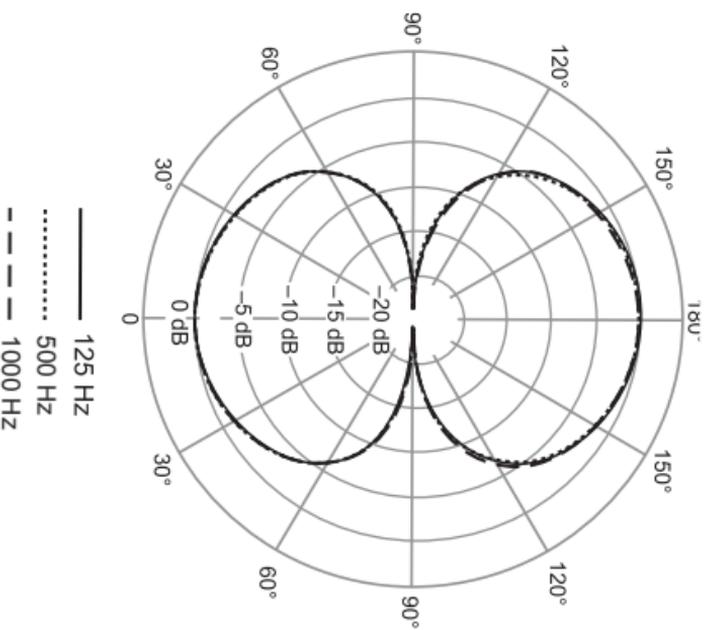
### KSM313 Frequency Response – Front



### KSM313 Frequency Response – Rear



# KSM313 Polar Pattern



## ACCESSORIES AND PARTS

### Furnished

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Monocle Mount

A313M

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### Optional

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Shock Mount

A313SM

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## CERTIFICATION

Eligible to bear CE Marking. Conforms to European EMC Directive 2004/108/EC. Meets Harmonized Standards EN55103-1:1996 and EN55103-2:1996, for residential (E1) and light industrial (E2) environments.

The Declaration of Conformity can be obtained from:

Authorized European representative:

Shure Europe GmbH

Headquarters Europe, Middle East & Africa

Department EMEA Approval

Wannenacker Str. 28

D-74078 Heilbronn, Germany

Phone: +49 7131 72 14 0

Fax: +49 7131 72 14 14

Email: [EMEAsupport@shure.de](mailto:EMEAsupport@shure.de)

## SERVICE

If you have any questions not answered in this booklet, please contact Shure Applications Engineering at 847-600-8440, Monday through Friday, from 8:00am to 4:30pm, CST. In Europe, call 49-7131-72140. Our web address is [www.shure.com](http://www.shure.com).

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## LIMITED WARRANTY

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Attention: Service Department  
5800 W. Touhy Avenue  
Niles, IL 60714-4608 U.S.A



**United States:**  
Shure Incorporated  
5800 West Touhy Avenue  
Niles, IL 60714-4608 USA

Phone: 847-600-2000  
Fax: 847-600-1212  
Email: [info@shure.com](mailto:info@shure.com)

**Europe, Middle East, Africa:**  
Shure Europe GmbH  
Wannenlaekstr. 26,  
74076 Heilbronn, Germany

Phone: 49-7131-72140  
Fax: 49-7131-721414  
Email: [info@shure.de](mailto:info@shure.de)

**Asia, Pacific:**  
Shure Asia Limited  
Unit 301, 3rd Floor  
Citycomp Centre  
18, Whitfield Road  
Causeway Bay, Hong Kong

Phone: 852-2893-4290  
Fax: 852-2893-4055  
Email: [info@shure.com.hk](mailto:info@shure.com.hk)

**Canada, Latin America,  
Caribbean:**  
Shure Incorporated  
5800 West Touhy Avenue  
Niles, IL 60714-4608 USA

Phone: 847-600-2000  
Fax: 847-600-6446  
Email: [international@shure.com](mailto:international@shure.com)

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