

**SHURE**  
SHURE SM58  
Unidirectional  
Dynamic  
Microphone



# SHURE SM58 Unidirectional Dynamic Microphone User Guide

[Home](#) » [Shure](#) » SHURE SM58 Unidirectional Dynamic Microphone User Guide 

## Contents

- 1 SHURE SM58 Unidirectional Dynamic Microphone
- 2 UNIDIRECTIONAL DYNAMIC MICROPHONE
- 3 Features
- 4 PROXIMITY EFFECT
- 5 APPLICATIONS AND PLACEMENT
- 6 GENERAL RULES FOR MICROPHONE USE
- 7 SPECIFICATIONS
- 8 CERTIFICATION
- 9 Frequently Asked Questions
- 10 Documents / Resources
  - 10.1 References
- 11 Related Posts

**SHURE**

## SHURE SM58 Unidirectional Dynamic Microphone



## MODEL SM58

### UNIDIRECTIONAL DYNAMIC MICROPHONE

The Shure SM58 is a unidirectional (cardioid) dynamic vocal microphone designed for professional vocal use in sound reinforcement and studio recording. A highly effective, built-in, spherical filter minimizes wind and breath “pop” noise. A cardioid pickup pattern isolates the main sound source while minimizing unwanted background noise. The SM58 has a tailored vocal response for a sound which is a world standard. Rugged construction, a proven shock mount system, and a steel mesh grille ensure that even with rough handling, the SM58 will perform consistently. Outdoors or indoors, singing or speech—the SM58 is the overwhelming choice of professionals worldwide.

#### Features

- Frequency response tailored for vocals, with brightened midrange and bass roll-off
- Uniform cardioid pickup pattern isolates the main sound source and minimizes background noise
- Pneumatic shock-mount system cuts down handling noise
- Effective, built-in spherical wind and pop filter
- Supplied with break-resistant stand adapter which rotates 180
- Legendary Shure quality, ruggedness, and reliability

#### Variations

SM58

SM58S (With On/Off Switch)

### PROXIMITY EFFECT

When the sound source is less than 6 mm (1/4 in.) from the microphone, the microphone boosts bass frequencies (by 6 to 10 dB at 100 Hz), creating a warmer and richer bass sound than when farther away. This effect, known as proximity effect, happens only in unidirectional dynamic microphones like the SM58. The SM58 low-frequency roll-off provides greater control, allowing the user to take full advantage of proximity effect.

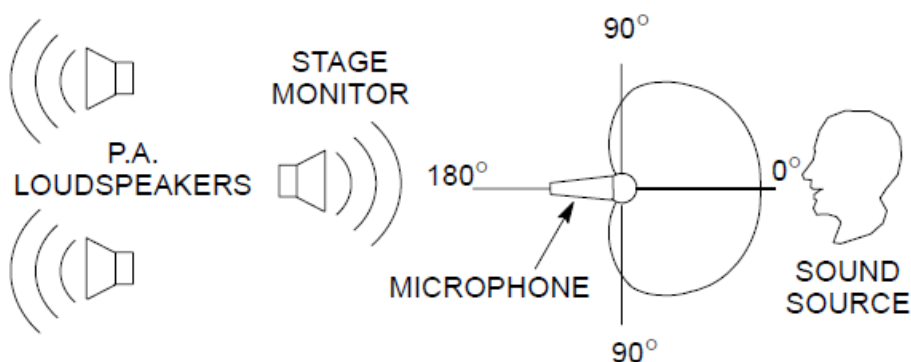
### APPLICATIONS AND PLACEMENT

The SM58 is ideal for close-up vocals and can be held in the hand or mounted on a stand. Some of the most common applications and placement techniques are listed in the following table. Keep in mind that microphone technique is largely a matter of personal taste—there is no one “correct” microphone position.

APPLICATION	SUGGESTED MICROPHONE PLACEMENT	STONE QUALITY
<b>Lead &amp; Backup Vocals</b>	Lips less than 150 mm (6 in.) away or touching the windscreen, on axis to microphone.	Robust sound, emphasized bass, maximum isolation from other sources.
<b>Speech</b>	150 mm (6 in.) to .6 m (2 ft) away from mouth, just above nose height.	Natural sound, reduced bass.
	200 mm (8 in.) to .6 m (2 ft) away from mouth, slightly off to one side.	Natural sound, reduced bass and minimal "s" sounds.
	1 m (3 ft) to 2 m (6 ft) away.	Thinner; distant sound; ambience.

### STAGE MONITOR & P.A. LOUDSPEAKER PLACEMENT

Place the stage monitor directly behind the microphone (see Figure 1). Locate the P.A. loudspeakers so that they point away from the rear of the microphone. With the speakers located in these positions, the possibility of feedback is greatly reduced. Always check the stage setup before a performance to ensure optimum placement of microphones and monitors.



**RECOMMENDED LOUDSPEAKER PLACEMENT  
FIGURE 1**

### GENERAL RULES FOR MICROPHONE USE

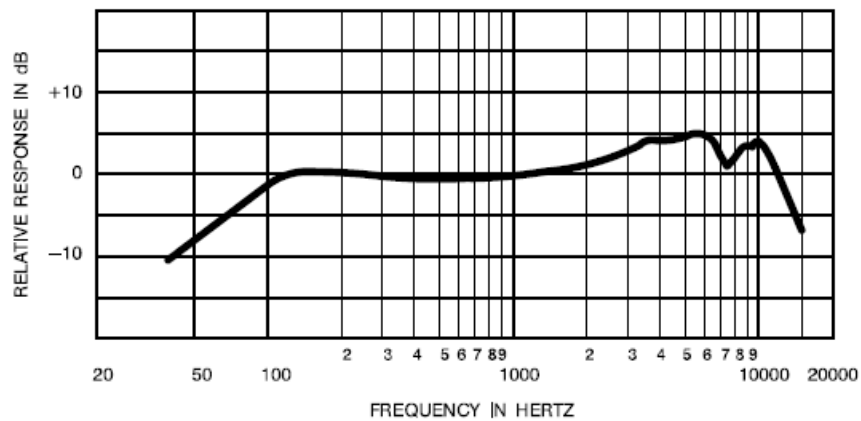
1. Aim the microphone toward the desired sound source and away from unwanted sources.
2. Locate the microphone as close as practical to the desired sound source.
3. Work close to the microphone for extra bass response.
4. Use only one microphone per sound source.
5. Locate microphones at least three times as far from other microphones as from the sound source.
6. Use as few microphones as practical.
7. Place microphones far from sound-reflecting surfaces.
8. Add a windscreen when using the microphone outdoors, for closeup speech, or vocals.
9. Avoid excessive handling to minimize mechanical noise.

### SPECIFICATIONS

#### Type

Dynamic (moving coil)

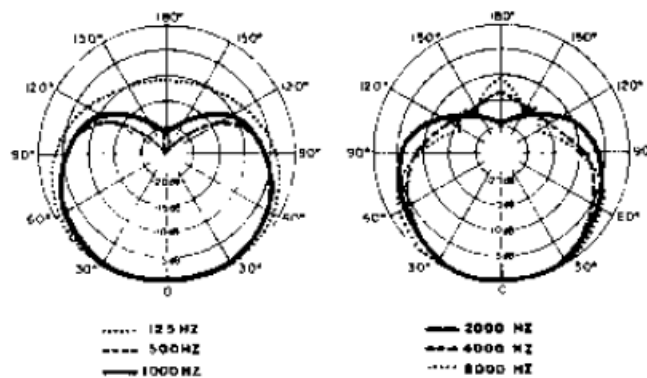
Frequency Response 50 to 15,000 Hz (see Figure 2)



**TYPICAL FREQUENCY RESPONSE**  
**FIGURE 2**

### Polar Pattern

Unidirectional (cardioid), rotationally symmetrical about microphone axis, uniform with frequency (see Figure 3)



**TYPICAL POLAR PATTERNS**  
**FIGURE 3**

Sensitivity (at 1,000 Hz Open Circuit Voltage)  $-54.5 \text{ dBV/Pa}$  ( $1.85 \text{ mV}$ )  $1 \text{ Pa} = 94 \text{ dB SPL}$

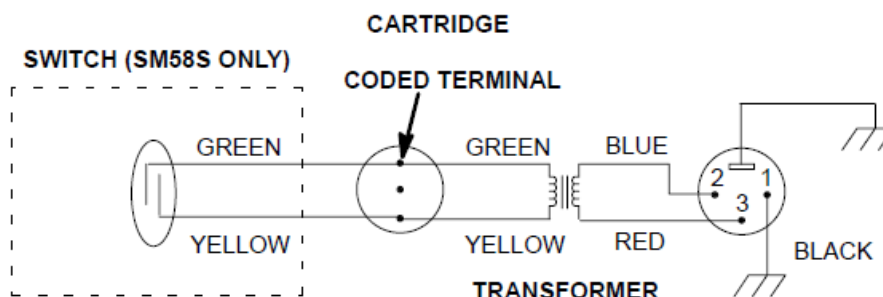
### Impedance

Rated impedance is 150 (300 actual) for connection to microphone inputs rated low impedance

### Polarity

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

### Internal Connections (Figure 4)



**INTERNAL CONNECTIONS**  
**FIGURE 4**

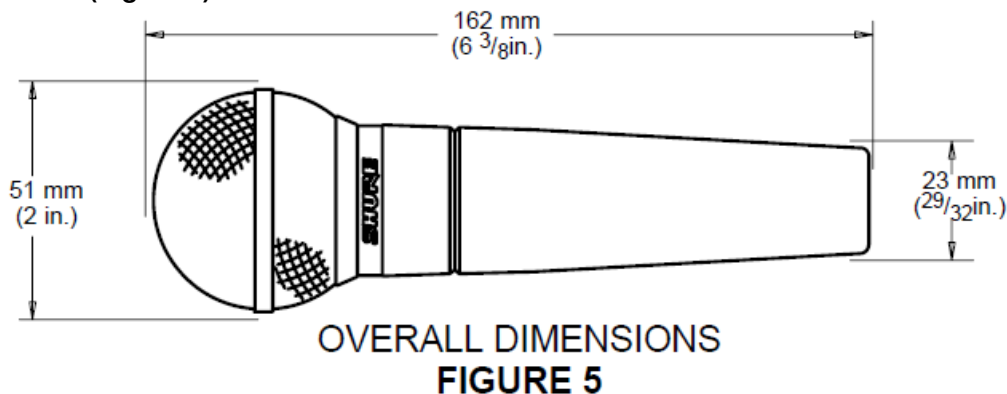
### Connector

Three-pin professional audio connector (male XLR type)

## Case

Dark gray, enamel-painted, die-cast metal; matte-finished, silver colored, spherical steel mesh grille

## Overall Dimensions (Figure 5)



## Swivel Adapter

Positive-action, break-resistant, adjustable through 180°, with standard 5/8 in.–27 thread

**Net Weight** 298 grams (10.5 oz)

## CERTIFICATION

Eligible to bear CE Marking. Conforms to European EMC Directive 89/336/EEC. Meets applicable tests and performance criteria in European Standard EN55103 (1996) parts 1 and 2, for residential (E1) and light industrial (E2) environments.

## FURNISHED ACCESSORIES

- Swivel Stand Adapter . . . . . A25D
- Storage Bag . . . . . 26A13

## OPTIONAL ACCESSORIES

- Windscreen . . . . . A58WS Series (8 colors available)
- Desk Stand . . . . . S37A, S39A
- Isolation Mount . . . . . A55M
- Dual Mount . . . . . A26M
- Cable (7.6 m [25 ft]) . . . . . C25E, C25F

## REPLACEMENT PARTS

- Cartridge . . . . . R59
- Screen and Grille Assembly . . . . . RK143G

For additional service or parts information, please contact Shure's Service Department at 1- [800-516-2525](tel:800-516-2525). Outside the United States, please contact your authorized Shure Service Center.

SHURE Incorporated Web Address: <http://www.shure.com> 222 Hartrey Avenue, Evanston, IL 60202–3696, U.S.A. Phone: 847-866–2200 Fax: [847-866-2279](tel:847-866-2279)  
In Europe, Phone: 49-7131-72140 Fax: 49-7131-721414

## Frequently Asked Questions


- **Q: How do I minimize background noise during vocal recordings?**

A: Ensure that the microphone is positioned close to the sound source and use a unidirectional cardioid pickup pattern to isolate the main sound source and minimize background noise.



- **Q: Can the microphone be used for instruments other than vocals?**

A: While the SM58 is tailored for vocals, it can also be used for instruments, depending on the desired sound characteristics. Experiment with placement and proximity to achieve the desired results.

## Documents / Resources

	<a href="#">SHURE SM58 Unidirectional Dynamic Microphone [pdf] User Guide</a> SM58, SM58S, SM58 Unidirectional Dynamic Microphone, SM58 Microphone, Unidirectional Dynamic Microphone, Unidirectional Microphone, Dynamic Microphone, Microphone
---	---

## References

-  [Your Ultimate Resource for Millions of User Manuals](#)
-  [Shure: Microphones, Wireless microphones, in-ear monitoring, earphones, headphones - Shure USA](#)
- [User Manual](#)

[Manuals+.](#) [Privacy Policy](#)

This website is an independent publication and is neither affiliated with nor endorsed by any of the trademark owners. The "Bluetooth®" word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. The "Wi-Fi®" word mark and logos are registered trademarks owned by the Wi-Fi Alliance. Any use of these marks on this website does not imply any affiliation with or endorsement.