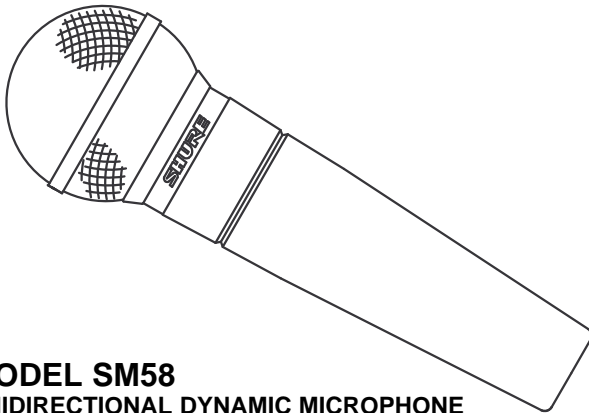


# SHURE®

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## Model SM58 User Guide



### 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 rolloff
- 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 ( $\frac{1}{4}$  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.

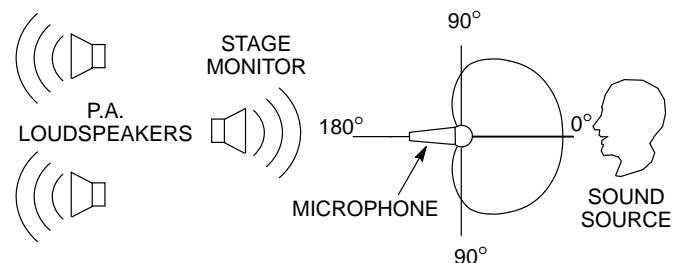
#### APPLICATIONS AND PLACEMENT

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	TONE QUALITY
Lead & Backup Vocals	Lips less than 150 mm (6 in.) away or touching the wind-screen, on axis to microphone.	Robust sound, emphasized bass, maximum isolation from other sources.
Speech	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 microphone 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.

**GENERAL RULES FOR MICROPHONE USE**

- 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.

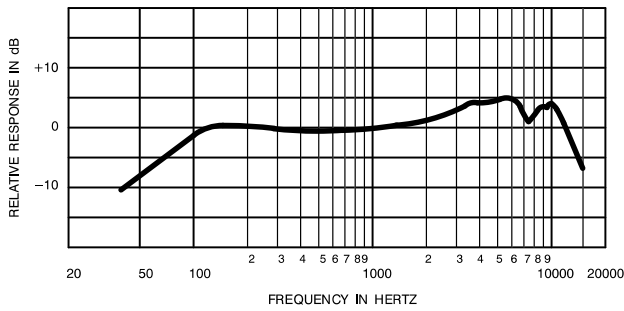
**SPECIFICATIONS**

**Type**

Dynamic (moving coil)

**Frequency Response**

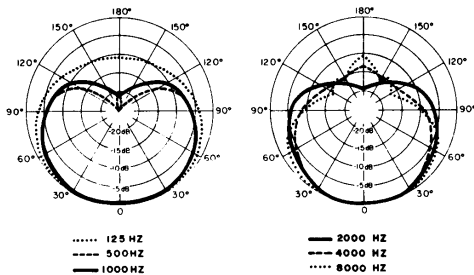
50 to 15,000 Hz (see Figure 2)



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

**Output Level (at 1,000 Hz)**

Open Circuit Voltage: -74.5 dB\* (0.19 mV)  
Power Level: -56.0 dB\*\*

\*0 dB = 1 v/μbar

\*\*0 dB = 1 mw/10 μbar

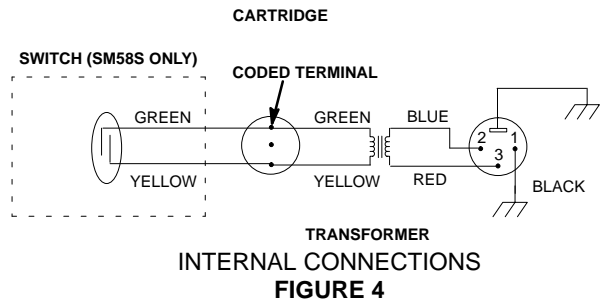
**Impedance**

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

**Phasing**

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

**Internal Connections (Figure 4)**



INTERNAL CONNECTIONS  
FIGURE 4

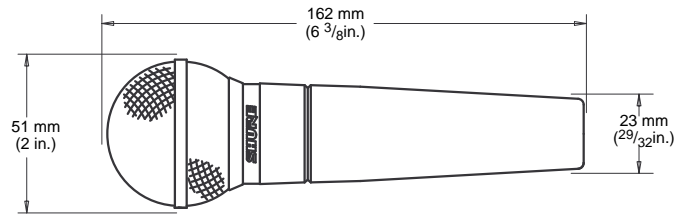
**Connector**

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)**



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**

Conforms to European Union directives, eligible to bear CE marking; meets European Union EMC Immunity Requirements (EN 50 082-1, 1992); RF radiated (IEC 801-3); ESD (IEC 801-2); EFT (IEC 801-4).

**FURNISHED ACCESSORIES**

- Swivel Stand Adapter ..... A25C
- 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. Outside the United States, please contact your authorized Shure Service Center.