

SM58

Vocal Microphone

The Shure legendary cardioid dynamic vocal microphone, SM58, user guide.

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Table of Contents

	Proximity Effect		4
SM58 Vocal Microphone	3		
		Specifications	4
General Description	3		
Features	3	Accessories	6
		Furnished Accessories	6
Placement	3	Optional Accessories	6
General Rules for Use	3	Replacement Parts	7
Applications And Placement	4		
Avoiding Pickup of Unwanted Sound Sources	4	Certifications	7

SM58 Vocal Microphone

General Description

The Shure SM58[®] is a unidirectional (cardioid) dynamic vocal microphone 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 shockmount 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

- · Performance tested, industry standard
- · Uniform cardioid pick-up pattern for maximum gain before feedback and excellent rejection of off-axis sound
- Tailored frequency response specifically shaped for vocals, with brightened midrange and bass roll off to control proximity
 effect
- Advanced pneumatic shock mount system that minimizes transmission of mechanical noise and vibration
- · Steel-mesh grille and enamel-coated metal construction resist wear and abuse
- · Effective built in pop-filter reduces undesirable wind and breathe noise
- · Furnished with zippered storage bag and break-resistant stand adapter
- On/Off switch (SM58S only)
- · Extremely durable under the heaviest use
- · Shure quality, ruggedness and reliability

Placement

General Rules for Use

- Aim the microphone toward the desired sound source (such as the talker, singer, or instrument) and away from unwanted sources.
- Place the microphone as close as practical to the desired sound source.
- · Work close to the microphone for extra bass response.
- Use only one microphone to pick up a single sound source.
- · Use the fewest number of microphones as practical.
- Keep the distance between microphones at least three times the distance from each microphone to its source.
- · Place microphones as far as possible from reflective surfaces.
- · Add a windscreen when using the microphone outdoors.
- · Avoid excessive handling to minimize pickup of mechanical noise and vibration.
- · Do not cover any part of the microphone grille with your hand, as this will adversely affect microphone performance.

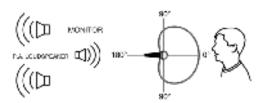
Applications And Placement

The following table lists the most common applications and placement techniques. 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
Vocals	Lips less than 15 cm (6 in.) away or touching the windscreen, on axis to microphone.	Robust sound, emphasized bass, maximum isolation from other sources.
	15 to 60 cm (6 in. to 2 ft.) away from mouth, just above nose height.	Natural sound, reduced bass.
	20 to 60 cm (8 in. to 2 ft.) away from mouth, slightly off to one side.	Natural sound, reduced bass and minimal "s" sounds.
	90 cm to 1.8 m (3 to 6 ft.) away.	Thinner, distant sound; noticeable levels of ambient noise.

Avoiding Pickup of Unwanted Sound Sources

Place the microphone so that unwanted sound sources, such as monitors and loudspeakers, are directly behind it. To minimize feedback and ensure optimum rejection of unwanted sound, always test microphone placement before a performance.



Recommended Loudspeaker Locations for Cardioid Microphones

Proximity Effect

Unidirectional (cardioid) microphones progressively boost bass frequencies by 6 to 10 dB below 100 Hz when the microphone is at a distance of about 6 mm (1/4 in.) from 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 bass response gradually rolls off. This provides greater control and helps the user take advantage of proximity effect.

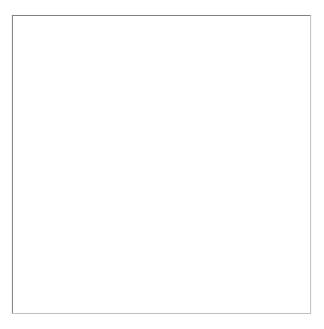
Specifications

Type

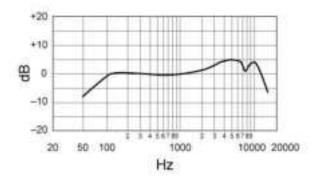
Dynamic (moving coil)

Frequency Response 50 to 15,000 Hz

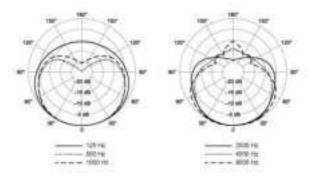
Polar Pattern Cardioid



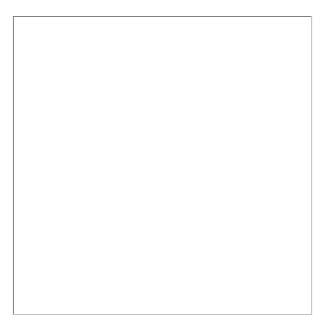
Wiring Diagram



Typical Frequency Response



Typical Polar Pattern



Overall Dimensions

Accessories

Furnished Accessories

Microphone Clip for SM58, SM57, SM87A, BETA87A, BETA87C, PGA57, PGA58, PGA48, PGA81	A25D
Carrying/Storage Bag	95A2313

Optional Accessories

A58WS
S37A
A55M
A55HM
A26M
C25E
C25F

Replacement Parts

Grille for Wired and Wireless SM58	RK143G
Cartridge for SM58	R59

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

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