

**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

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- 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.

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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.



## **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**

#### Туре

Dynamic (moving coil)

#### **Frequency Response**

55 to 14,000 Hz

#### **Polar Pattern**

Cardioid

#### **Output Impedance**

EIA rated at 150  $\Omega$  (270  $\Omega actual)$ 

#### Sensitivity



#### Polarity

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

#### Weight

Net: 0.37 kg (0.82 lb) Packaged: 0.672 kg (1.5 lb)

#### Connector

Three-pin professional audio (XLR), male

#### [1] 1 Pa=94 dB SPL







**Overall Dimensions** 

## Accessories

### **Furnished Accessories**

Microphone Clip for SM58, SM57, SM87A, Beta 87A, Beta 87C, PGA57, PGA58, PGA48, PGA81

A25D

Carrying/Storage Bag

95A2313

### **Optional Accessories**

Foam Windscreen for all larger Shure "ball-type" Microphones available in black, blue, gray, green, red and yellow



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Desk Stand

S37A

Shock Stopper

Isolation Mount

A55M

Shock Stopper Isolation Mount

A55HM

Over/Under Dual Mount for two microphones: SM57, Beta 57A or 545 Series microphones

A26M

25 foot (7.5m) Triple-Flex® Microphone XLR Cable with chrome connectors

C25F

### **Replacement Parts**

Grille for SM48 Series

RK248G

Cartridge for SM48

R136

# 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: <u>www.shure.com/europe/compliance</u>

Authorized European representative:



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