

MODEL 587SB UNIDIRECTIONAL DYNAMIC MICROPHONE



GENERAL

Shure's Unisphere® Model 587SB is a unidirectional dynamic microphone designed for quality vocal performance in any environment. Its unidirectional (cardioid) pickup pattern means greater control over feedback, reverberation and background noise, and its dynamic cartridge provides the optimum combination of ruggedness and wide-range response. In addition, its highly effective built-in windscreen protects against objectionable wind noise and "pop" (explosive breath sounds).

The 587SB is a super performer in any vocal application—sound reinforcement, recording or radio and TV broadcasting. Reliability—plus is the carefully planned result of its rugged cartridge shock mount, tough ball screen, long-life on-off switch, and virtually indestructible handle—all contribute to years of trouble-free operation.

The Shure 587SB-LC is supplied with a swivel adapter and without a cable.

Features

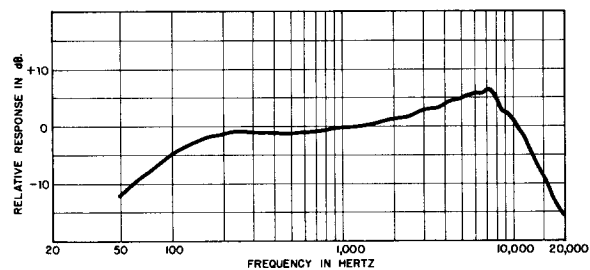
- Built-in spherical filter for control of explosive breath sounds ("pop") and wind noise in outdoor use
- Unidirectional (cardioid) pickup pattern minimizes background noise and undesirable effects of location and studio acoustics. Reduces feedback, prevents echo, and permits performance closer to loudspeakers
- Exceptional reproduction of voice and music; complements any high-quality sound system or recorder
- Long-life lockable on-off switch for complete performer control
- Cartridge shock-mounted for low handling noise and cartridge protection
- Wind/pop filter readily removed for cleaning or replacement

- Adjustable swivel adapter allows precise aiming of microphone and easy, silent removal for hand-held use
- Ideal for any use—in the field or studio, hand-held or stand-mounted

SPECIFICATIONS

Type

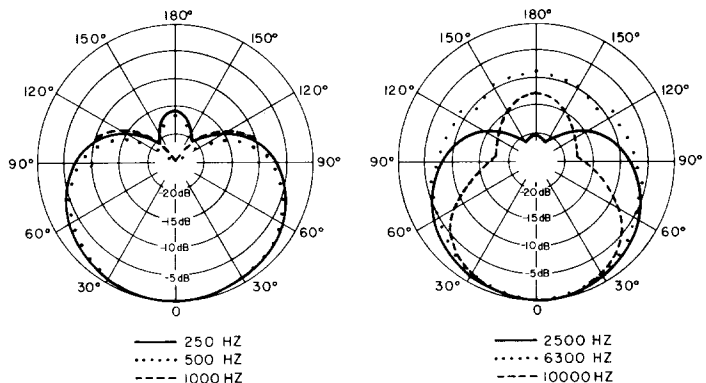
Dynamic



TYPICAL FREQUENCY RESPONSE
FIGURE 1

Frequency Response

55 to 14,000 Hz (see Figure 1)



TYPICAL POLAR PATTERNS
FIGURE 2

Polar Pattern

Cardioid (unidirectional)—rotationally symmetrical about microphone axis, uniform with frequency (see Figure 2)

Impedance

Microphone rating impedance is 150 ohms (270 ohms actual) for connection to microphone inputs rated at 19 to 300 ohms

Output Level (at 1,000 Hz)

Open Circuit Voltage* -77.5 dB (0.13 mV)
Power Level** -59 dB

*0 dB = 1 V/ μ bar

**0 dB = 1 mW/10 μ bar

Hum Pickup (typical)

32 dB equivalent SPL per millioersted (60 Hz)

Case

Platinum beige die casting and steel mesh grille

Connector

Professional three-pin XLR audio connector designed to mate with Cannon XL series, Switchcraft A3 (Q.G.) series or equivalent connector

Cartridge Shock Mount

Internal rubber vibration-isolator

Switch

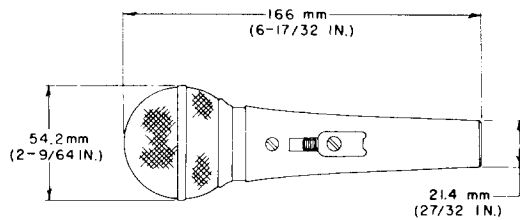
Built-in On-Off switch with lockplate. To lock switch in On position, remove screw on lockplate and turn lockplate 180°. Reassemble and tighten screw

Phasing

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

Dimensions

See Figure 3



OVERALL DIMENSIONS
FIGURE 3

Net Weight

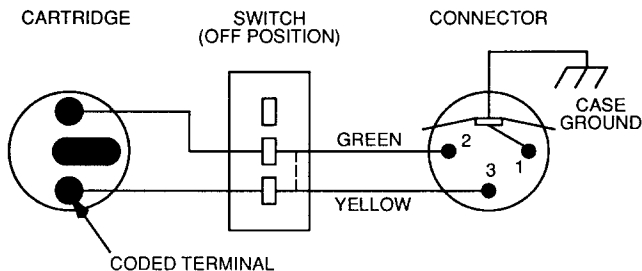
370 grams (13.1 oz)

Packaged Weight

672 grams (1 lb 8-1/2 oz)

Swivel Adapter

Positive action, adjustable through 90° from vertical to horizontal, permits easy removal for handheld use, suitable for mounting on stand with 5/8"-27 thread



INTERNAL CONNECTIONS
FIGURE 4

PHASING

To test two microphones and/or their cables for proper phasing, connect them to an amplifier and talk or sing into them while holding them three or four inches apart. The sound from the speakers should be the same when talking into either microphone or directly between them if they are in phase with each other. If the sound drops drastically, or if a dead spot is found when talking between the two microphones, either the microphones or their cables (low impedance only) are out of phase. All cables and microphones should be tested in this manner to insure that they are in phase with each other

To change the phase of a low-impedance microphone cable, either use a Shure A15PRS Phase Reverser or interchange the wires connected to pins 2 and 3 of the connector. To change the phase of a microphone, the microphone cartridge leads must be interchanged (see Figure 4). This should be performed by your dealer, the Shure Factory Service Department, or other qualified service personnel.

ARCHITECTS' SPECIFICATIONS

The microphone shall be a moving coil (dynamic) type with a frequency response of 55 to 14,000 Hz. The unit shall have a cardioid (unidirectional) polar characteristic. The cancellation at the sides shall be approximately 6 dB, and the cancellation at the rear shall be 15 to 20 dB. The microphone shall have a rating impedance of 150 ohms. The microphone output shall be -59 dB where 0 dB = 1 milliwatt per 10 microbars.

The microphone connector shall be a 3-pin professional XLR audio type designed to mate with Cannon XL series, Switchcraft A3 (Q.G.) series, or equivalent connectors. The microphone shall be provided with a swivel adapter adjustable through 90° from vertical to horizontal. The adapter will mount on a stand having a 5/8"-27 thread. The overall dimensions of the microphone shall be 166 mm (6-17/32 in.) in length and 54.2 mm (2-9/64 in.) in diameter.

The microphone shall be a Shure Model 587SB or equivalent.

FURNISHED ACCESSORY

Swivel Adapter A25B

OPTIONAL ACCESSORIES

Windscreen A58WS
Desk Stand S37A, S39A
Isolation Mount A55M, A55HM
Dual Mount A26M
Cable (7.6m-25 ft) C25F

REPLACEMENT PARTS

Cartridge R136
Screen and Grille Assembly RK252G
Plug Assembly RK40P
On-Off Switch 55A176